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BULLETIN

School of Medicine
University of Maryland



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JANUARY, APRIL, JULY AND OCTOBER

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SCHOOL OF MEDICINE OF THE UNIVERSITY OF MARYLAND

AND THE MEDICAL ALUMNI ASSOCIATION

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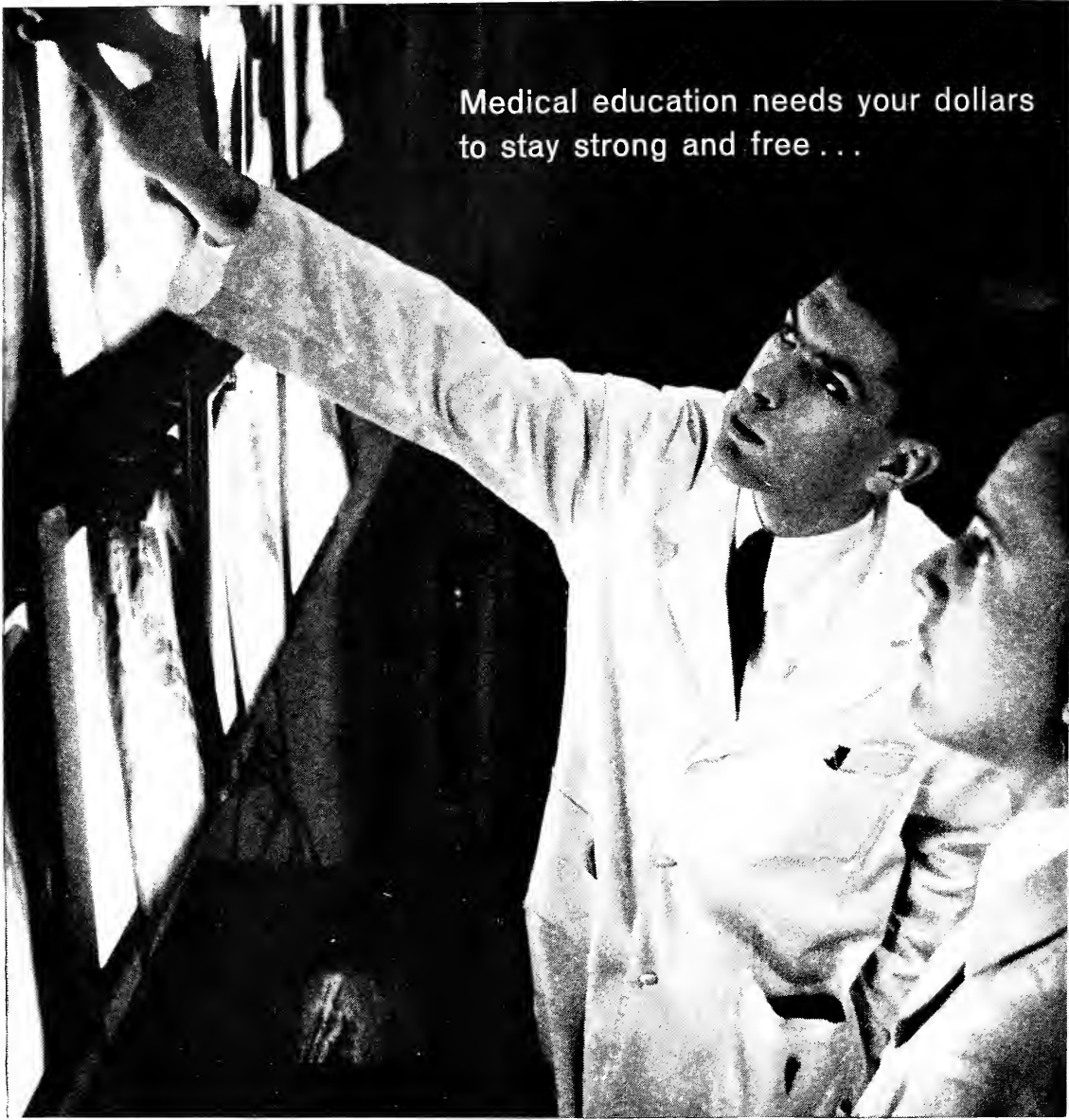
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BULLETIN *School of Medicine*
University of Maryland

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Editorial

WITH THIS number the BULLETIN begins its fifty-first year. Replacing several older publications, the BULLETIN made its initial appearance at the Commencement in 1916.

Two wars and momentous medical developments have bridged this half century during which the School of Medicine has also changed, most notably from a proprietary medical college to its present position as a part of a great state university. An almost complete change of faculty has occurred, but more than 400 alumni of the classes preceding 1916 are yet in practice.

With a welcome financial assist from the Medical Alumni Association the BULLETIN will extract from its files some of the important, the interesting, the historic and, perhaps, the humorous, reprinting for our more recent faculty and alumni, bits of the past of this old and venerable institution.

For future readers we believe that appropriate predictions and extensions by faculty and alumni are in order, so we have asked that they write concisely their predictions for the next 50 years in their respective fields of interest or specialty.

To the elder physician we hope we can achieve a measure of nostalgia. To the young man we offer a bit of the contemporary history of the School of Medicine and to all, hopefully, a glimpse into the future and for things to come.

J. A. W.

THE NEW LOOK

Changes now taking place in Baltimore reflect rapid strides in both the redevelopment of the downtown area and the expansion of the Baltimore Schools of the University of Maryland. On the center pages of the BULLETIN is a recent aerial photograph which reveals a number of changes that have taken place since many of you have visited the campus.

The central portion of the complex is

the multi-level University Hospital. Across from it is the Bressler Building and to the right of this can be seen the dome of Davidge Hall, the old building. To the west of the Hospital may be seen the parking garage operated by the University and St. Paul's cemetery. Just across the street is Howard Hall, formerly the old Hecht store. The adjacent two complete blocks of parking lots represent

areas of complete demolition of such favorite haunts as Al's Restaurant, barber shops, the University Restaurant, several taverns, the Arundel, and many other nostalgic spots. In this four-block complex, only a school and the Westminster Church remain.

Just adjacent to the Westminster Church is the skeleton of the new University of Maryland School of Law, standing on the site of the former Biltmore Hotel.

Coming now to Lombard Street and beginning at Penn Street, there is a succession of new buildings including a pharmaceutical museum, a new pharmacy

building and a new building for the nursing school, then comes the nurses' home and the dental school as before. Directly across the street is a "V" shaped building, the first element of a student union building which will ultimately replace the old hospital which can be seen immediately adjacent to it. This new student union is surrounded by a complex of parking lots and tennis courts. Directly opposite Davidge Hall is the new library building which can be seen across the street from the old University Hospital.

J. A. W.

Dr. Davis to Receive 1965 Alumni Honor Award and Gold Key

DR. THEODORE M. DAVIS of 108 Van-nay Street, Greenville, South Carolina, and a graduate of the School of Medicine in the Class of 1914, has been nominated the recipient of the 1965 Alumni Honor Award and gold key. Dr. Davis, an eminent urologist, will be presented for the award on the occasion of the annual alumni reunion in June. The April 1965 BULLETIN of the School of Medicine will contain details of Dr. Davis' biography.

Studies on the Reaction Products of bis-*B*-Chloroethyl Sulfide-S³⁵ with Cellular Polynucleotides and Nucleic Acid Bases*†

ROBERT S. ROZMAN, Ph.D., and CLARKE DAVISON, Ph.D.

MUSTARD GAS (bis- β -chloroethyl sulfide) was first synthesized over 140 years ago. It remained a laboratory curiosity until 1917 when the Germans utilized its vesicant properties with devastating effect during World War I at the battle of Ypres. Attention was then focused upon the biological effects of this compound. Among these were the mutagenic and carcinogenic properties of the substance.

It was thus natural that investigators turn attention to the action of this alkylating agent on nucleoproteins and nucleic acids. Elmore *et al.*¹ concluded in 1948 that mustard gas esterified the primary phosphate groups of both DNA and RNA *in vitro*. Others^{2, 3} demonstrated, also *in vitro*, that mustard gas combines with purines and pyrimidines. Lawley in 1957⁴ concluded that deoxyguanylic acid is the most susceptible to attack of the DNA nucleotides.

These studies were extended to the nucleic acids⁵⁻⁸ using various experimental conditions. This report presents evidence that alkylation of nucleic acids both *in vitro* and *in vivo* occurs with a definite preference for the guanine-cytosine base pair.

Materials and Methods

1. Synthesis and purification of compounds.

Bis- β -chloroethyl sulfide-S³⁵ was syn-

thesized by modifications of the methods of Bournsnel *et al.*⁹ and Reeves and Love.¹⁰ After purification by continuous extraction with petroleum ether and molecular distillation, yields of 95% with radiopurity greater than 99% were obtained. Specific activities up to 100 μ c/mg were routinely obtained.

Bis- β -hydroxyethyl sulfide-S³⁵ (thiodiglycol-S³⁵) was produced by the hydrolysis of mustard gas-S³⁵ in 0.1 *N* sodium hydroxide.

Products labeled in the alkyl moiety were produced by reacting bis- β -chloroethyl sulfide-S³⁵ with non-radioactive purines and pyrimidines in 0.1 *N* sodium hydroxide. Radioactive purines and pyrimidines were alkylated with non-radioactive mustard gas for comparative purposes. Non-radioactive products were produced by reaction of non-radioactive bases with non-labeled mustard gas. The resultant mixtures were separated chromatographically.

2. Reaction of biological materials with bis- β -chloroethyl sulfide-S³⁵.

Purified DNA and RNA were incubated in Robinson's medium with radioactive mustard gas for 20 minutes at 37°C. The products were hydrolyzed with perchloric acid¹¹ and purified on charcoal columns.

Ehrlich ascites carcinoma cells were treated with mustard gas-S³⁵ as above. The following fractions¹² were obtained: acid soluble, lipid, protein, nucleic acid and isolated nucleic acid bases.

One mouse with a 5-day Ehrlich ascites tumor was injected intraperitoneally with

* From the Department of Pharmacology, University of Maryland School of Medicine, Baltimore, and the Department of Pharmacology, The George Washington University School of Medicine, Washington, D. C.

† This research was performed in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

mustard gas-S³⁵. After 30 minutes the tumor cells were harvested and alkylated nucleic acid bases were isolated.

3. Physical and chemical techniques.

Paper chromatography was utilized for separation of compounds. Radioautography and ultra-violet photography enabled localization of the spots.

All quantitation of radioactivity was carried out in proportional flow counters using natural gas.

Ultra-violet and infrared spectroscopy were utilized in determining the structure of various compounds.

Table I. Distribution of Radioactivity in Fractions of Ehrlich Ascites Cells after Incubation in Vitro with Sulfur Mustard-S³⁵

Fraction	% of Total Incorporated	
	Range*	Mean
Acid Soluble	36-61	50
Lipid.....	13-17	15
Nucleic Acid.....	9-14	11
Isolated Nucleic Acid Bases.....	1
Protein.....	12-35	24

* Fifteen different flasks were fractionated in 3 different experiments.

Results

Table I summarized the distribution of radioactivity found in the various fractions from ascites cells after *in vitro* incubation with mustard gas-S³⁵. That the radioactivity in the nucleic acids was not due to contamination with thiodiglycol-S³⁵ was demonstrated by isolation of nucleic acids after incubation of ascites cells with this compound.

Hydrolysis products of the isolated alkylated nucleic acids, when subjected to two-dimensional paper chromatography, yielded the pattern of radioactivity shown in figure 1. The same pattern was obtained for both DNA and RNA after

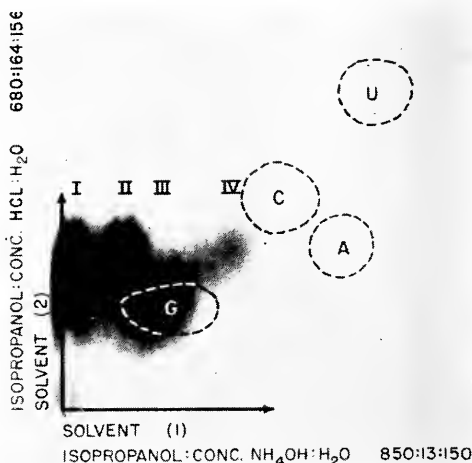


Fig. 1. Radioautogram of two-dimensional ascending chromatogram of hydrolyzed alkylated nucleic acid obtained from Ehrlich ascites cells incubated with sulfur mustard-S³⁵ *in vitro*. The positions of the natural bases are outlined.

alkylation *in vitro* and *in vivo* and alkylation of purified nucleic acids. It thus appears that the same products are formed regardless of the nucleic acid source.

The products obtained from alkylation of the individual purines and pyrimidines were separated chromatographically. At least 7, 3, 6, 5 and 2 alkylated compounds could be demonstrated for guanine, adenine, cytosine, uracil, and thymine, respectively. Figure 2 shows the pattern of

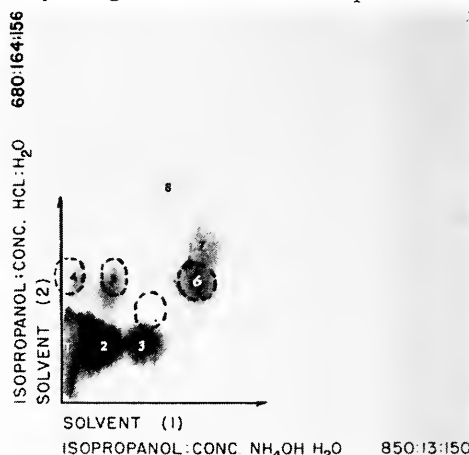


Fig. 2. Ultra-violet fluorescent picture of two-dimensional chromatogram of guanine reacted with mustard gas. The dashed lines outline the positions of the radioactive products from nucleic acid shown in figure 1.

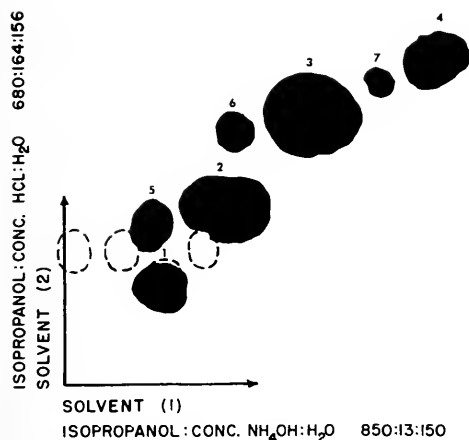
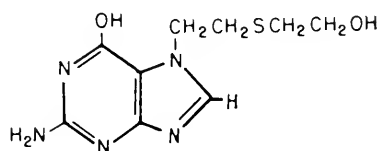


Fig. 3. Photograph (using ultra-violet picture as the negative) of two-dimensional chromatogram of cytosine reacted with mustard gas. The dashed lines represent the positions of the radioactive products from nucleic acid shown in figure 1.

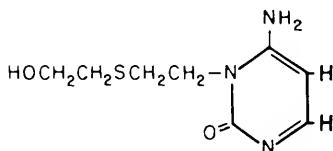
alkylated guanine and figure 3 the pattern of alkylated cytosine. As can be seen, 3 of the guanine products and 1 of the cytosine products coincide in R_f with the radioactive alkylated bases shown in figure 1. Since none of the alkylated adenine, uracil or thymine yielded R_f values approximating those of the radioactive alkylated bases, research was confined to determining the structures of the alkylated guanine and cytosine.

The materials from spots G_4 , G_5 and G_6 (figure 2) were eluted and mixed with the corresponding radioactive materials prepared from alkylated nucleic acid. Chromatography in 4 consecutive solvent systems failed to separate the radioactivity from the ultra-violet absorbing material. Since the ratio of radioactivity to optical density remained constant, it was concluded that these alkylated guanines were identical to 3 of the compounds formed from the reaction of mustard gas with nucleic acids. The R_f values of these 3 compounds upon rechromatography changed and coincided with those values obtained upon treatment of the alkylated guanines with hydrogen peroxide. It was

concluded that all 3 original spots represented various stages of alteration of the same compound. Comparisons of the ultra-violet spectra and chromatographic behavior of these guanine compounds with a sample of 7-(β -hydroxyethylthioethyl) guanine* showed that spot I and the reference sample were identical and that spots II and IV represented oxidation products. Thus 60% of the alkylated bases could be accounted for as the compound 7-(β -hydroxyethylthioethyl) guanine (figure 4).



7-(β -HYDROXYETHYLTHIOETHYL)GUANINE



3-(β -HYDROXYETHYLTHIOETHYL)CYTOSINE

Fig. 4. Structure of the alkylated bases recovered from nucleic acids after mustard gas treatment.

One of the cytosine compounds (spot C_1) coincided in R_f with spot III from alkylated nucleic acids (figure 3): isotope dilution was therefore carried out as with the guanine derivatives. Chromatography in 4 consecutive solvent systems failed to change the radioactivity to optical density ratio. It was thus concluded that compound C_1 was identical to one of the products of nucleic acid alkylation.

For studies on chemical structure, 50 mg of compound C_1 was synthesized and purified chromatographically and by re-

* This sample was supplied by Dr. Peter Brookes, Chester Beatty Research Institute, Institute of Cancer Research, Royal Cancer Hospital, London, England.

Table II. Ultra-Violet Spectra of Cytosine Compounds

Compound	pH 1		pH 7		pH 13	
	λ max	λ min	λ max	λ min	λ max	λ min
Cytosine	208;276	238	268	248	280	250
5-methylcytosine	210;283	242	272	237	286	252
Cytidine	210;279	242	271	251	271	250
C ₁	215;283	242	274	252	273	251
C ₂	208;276	239	268	248	280	250
C ₃	210;283	242	274	251	274	251
C ₄	284	246	281	248	274	250

crystallization from boiling water. Elemental analysis showed a nitrogen to sulfur ratio of 3.24:1. A compound consisting of 1 cytosine molecule with 1 mustard gas residue has a ratio of 3.00:1.

Ultra-violet spectra (table II) and pK_a data suggested a ring nitrogen rather than the primary amine or carbons 5 or 6 as the site of attack. Infrared analysis indicated that nitrogen 1, the primary amine and the carbonyl group were not attacked. In addition, there were positive indications of an interaction at nitrogen 3. The existence of an alcoholic hydroxyl was deduced from the infrared spectrographic data. The compound thus was assigned the structure 3-(β -hydroxyethylthioethyl) cytosine, shown in figure 4. It accounted for about 40% of the total alkylated bases recovered from nucleic acids.

Discussion

Calculations indicate that approximately 2400 micromoles of mustard gas are attached per mole of nucleic acid *in vitro*, or that about 35 mustard residues were found to be attached per molecule of DNA. The alkylated guanine and cytosine accounted for approximately 3 mustard gas residues per molecule of DNA. If primary phosphate groups of nucleic acids are readily esterified by mustard gas,¹ the

smaller amount of mustard gas attached to the bases than to the nucleic acids themselves can be readily explained.

The isolation of the alkylated guanine was not unexpected since several authors^{3, 4, 6} have shown that guanine is the most reactive of the purine and pyrimidine bases toward mustard gas.

The presence of the alkylated cytosine and the absence of alkylated adenine is surprising since the reactivity of deoxyadenylic acid and deoxycytidylic acid toward alkylating agents are approximately the same.⁴ It may be that the more vigorous hydrolysis conditions used here degraded any alkylated adenines present.

The isolation of approximately equal amounts of alkylated guanine and alkylated cytosine (60% and 40% respectively) is of interest. In the generally accepted structure of DNA, guanine and cytosine are paired in the molecule. One may speculate that, at the concentrations used, the attack by mustard gas on one member of the pair increases the susceptibility of the other member to alkylation.

Summary

Two-dimensional paper chromatography of mustard gas reacted with guanine, adenine, cytosine, uracil and thymine revealed the presence of at least 7, 3, 6, 5, and 2 alkylated products respectively.

After *in vitro* treatment of ascites cells with mustard gas-S³⁵, approximately 35 mustard residues were found to be attached to the bases. The same 4 alkylated base products were isolated from purified DNA and RNA treated with mustard gas-S³⁵ as well as from ascites cells alkylated both *in vitro* and *in vivo*.

Chromatographic and spectrographic evidence indicates that 60% of the alkylated bases is 7-(β -hydroxyethylthioethyl) guanine or its oxidation products. The remaining 40% has been characterized as 3-(β -hydroxyethylthioethyl) cytosine.

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**DEPARTMENT
OF
OBSTETRICS & GYNECOLOGY**

ANNUAL REPORT

**Summary of Admissions, Discharges
and
Perinatal Mortality
University Hospital**

January 1, 1963 through December 31, 1963

**SCHOOL OF MEDICINE
UNIVERSITY OF MARYLAND**

Baltimore, Maryland 21201

Obstetrical Report for the University of Maryland Hospital

For Period January 1, 1963 through December 31, 1963

I. SUMMARY

	White	Non-White	Total
Total Discharges.....	941	2079	3020
Total Deliveries.....	867	1976	2843
Multiple Pregnancies			
Twins (No. of sets).....	8	41	49
By Cesarean section.....	0	4	4
Triplets (No. of sets).....	0	0	0
By Cesarean section.....	0	0	0
Total Adult Deaths.....	0	0	0
Rates per 1000 live births.....	0.0	0.0	0.0
Total Live Births.....	856	1935	2791
Total Fetal Deaths.....	11	41	52
Rate per 1000 total births.....	12.7	20.8	18.3
Total Neonatal Deaths.....	9	57	66
Rate per 1000 total births.....	10.4	28.9	23.2
Total Perinatal Mortality.....	20	98	118
Rate per 1000 total births.....	23.1	49.6	41.5
Perinatal Mortality (1000 grams & over).....	14	71	85
Rate per 1000 total births.....	16.2	35.9	29.9

II. TOTAL DISCHARGES BY TYPE OF DELIVERY

	White	Non-White	Total
Abortion*, completion of.....	1	0	1
Abortion, spontaneous.....	4	8	12
Abortion, therapeutic.....	0	0	0
Ectopic pregnancy, early.....	0	0	0
Ectopic pregnancy, late.....	0	0	0
Full Term, spontaneous delivery.....	284	906	1190
Full Term, operative delivery.....	500	688	1188
Premature†, spontaneous delivery.....	37	173	210
Premature, operative delivery.....	39	182	221
Immature‡, spontaneous delivery.....	5	24	29
Immature, operative delivery.....	2	3	5
Postpartum admission.....	0	0	0
Discharged undelivered.....	69	95	164
Not pregnant.....	0	0	0
Died undelivered.....	0	0	0
Total Discharges.....	941	2079	3020
Percentage.....	31.2	68.8	100.0

* An abortion is any fetus or infant weighing between 0–499 gm.

† A premature is any fetus or infant weighing between 1000–2499 gm.

‡ An immature is any fetus or infant weighing between 500–999 gm.

III. TOTAL DISCHARGES BY REASON FOR ADMISSION

	White	Non-White	Total
True labor.....	649	1511	2160
Suspected labor.....	31	23	54
Elective induction.....	57	8	65
Indicated induction.....	16	23	39
Postpartum admission.....	0	1	1
Ectopic pregnancy.....	0	0	0
Elective section.....	14	37	51
Abortion, threatened.....	0	0	0
Abortion, completion of.....	6	7	13
Abortion, therapeutic.....	0	0	0
Obstetrical disease.....	161	461	622
Medical disease.....	4	6	10
Surgical disease.....	2	2	4
Mole and Chorio-carcinoma.....	0	0	0
Not pregnant.....	0	0	0
Special study.....	1	0	0
Total.....	941	2079	3020

IV. SERVICE STATUS

Race	Private		Ward		Total	
	No.	%	No.	%	No.	%
White.....	440	82.9	501	20.1	941	31.2
Non-White.....	91	17.1	1988	79.9	2079	68.8
Total.....	531	100.0	2489	100.0	3020	100.0

V.—A AGE AND PARITY—TOTAL PATIENTS DELIVERED

White Discharges

AGE	PARITY												Total	Perinatal Mortality	
	0	1	2	3	4	5	6	7	8	9	10 & Over	Un-known		No.	%
Under 15....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
15-19.....	100	50	11	4	1	0	0	0	0	0	0	0	166	2(1)	1.2
20-24.....	85	92	52	22	18	7	4	0	0	0	0	0	280	3(1)	1.1
25-29.....	33	54	60	26	24	18	5	2	1	0	0	0	223	4(0)	1.8
30-34.....	11	22	24	26	14	9	12	1	1	0	0	0	120	3(2)	2.5
35-39.....	2	6	7	22	6	6	1	7	3	1	4	0	65	5(1)	7.7
40-44.....	0	0	2	3	1	2	3	0	1	0	1	0	13	3(1)	23.1
Total....	231	224	156	103	64	42	25	10	6	1	5	0	867	20(6)	2.3
Perinatal Mortality															
No.....	2(1)	4(1)	4(2)	2(1)	1(0)	0(0)	3(1)	1(0)	0(0)	0(0)	3(0)	0(0)			
Per Cent....	0.9	1.8	2.6	1.9	1.6	0.0	12.0	10.0	0.0	0.0	60.0	0.0			

The numbers in () indicate immature deaths.

V.—B AGE AND PARITY—TOTAL PATIENTS DELIVERED

Non-White Discharges

AGE	PARITY												Total	Perinatal Mortality	
	0	1	2	3	4	5	6	7	8	9	10 & Over	Un- known		No.	%
Under 15...	17	1	0	0	0	0	0	0	0	0	0	0	18	0(0)	0.0
15-19.....	269	144	56	14	4	1	0	0	0	0	0	0	488	28(10)	5.7
20-24.....	120	156	133	88	72	42	10	6	0	0	0	0	627	23(6)	3.7
25-29.....	17	34	60	78	73	56	37	15	18	3	1	0	392	18(4)	4.6
30-34.....	9	21	23	28	41	43	36	25	27	8	14	1	276	24(7)	8.7
35-39.....	3	3	14	14	17	12	23	15	5	8	11	3	128	4(0)	3.1
40-44.....	1	4	1	5	6	1	4	6	2	4	10	2	46	1(0)	2.2
45-49.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown...	1	0	0	0	0	0	0	0	0	0	0	0	1	0(0)	0
Total....	437	363	287	227	213	155	110	67	52	23	36	6	1976	98(27)	5.0
Perinatal Mortality															
No.....	22 (5)	17 (7)	9 (4)	11 (4)	13 (3)	8 (1)	7 (3)	8 (10)	1 (0)	0 (0)	1 (0)	1 (0)	98 (27)		
Per Cent...	5.0	4.7	3.1	4.8	6.1	5.2	6.4	11.9	1.9	0.0	2.8	16.7	5.0		

VI.—A PRENATAL CARE—TOTAL PATIENTS DELIVERED

Number of Prenatal Visits	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
0.....	56	6.5	171	8.7	227	8.0	25(16)	11.0
1-3.....	60	6.9	294	14.9	354	12.5	27(8)	7.6
4-6.....	123	14.2	512	25.9	635	22.3	27(6)	4.3
7-9.....	174	20.1	477	24.1	651	22.9	17(0)	2.6
10-12.....	127	14.6	264	13.4	391	13.8	4(0)	1.0
13 or more.....	96	11.1	123	6.2	219	7.7	2(0)	0.9
Elsewhere.....	95	11.0	64	3.2	159	5.6	5(0)	3.1
Unknown.....	136	15.7	71	3.6	207	7.3	11(3)	5.3
Total.....	867	100.0	1976	100.0	2843	100.0	118(33)	4.2

VI.—B TIME OF FIRST VISIT

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
13 weeks or earlier.....	108	12.4	150	7.6	258	9.1	8(0)	3.1
14-27 weeks.....	388	44.8	1003	50.8	1391	48.9	44(11)	3.2
28 weeks or later.....	186	21.4	562	28.4	748	26.3	27(3)	3.6
Unknown.....	185	21.4	261	13.2	446	15.7	39(19)	8.7
Total.....	867	100.0	1976	100.0	2843	100.0	118(33)	4.2

VII. PRESENTATIONS—TOTAL INFANTS

Presentation	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
Vertex.....	829	95.6	1860	94.1	2689	94.6	92(24)	3.4
Breech*.....	33	3.8	97	4.9	130	4.6	22(7)	16.9
Face.....	1	0.1	1	0.1	2	0.1	0(0)	0.0
Brow.....	0	0.0	3	0.2	3	0.1	0(0)	0.0
Compound.....	2	0.2	4	0.2	6	0.2	1(1)	16.7
Transverse.....	1	0.1	8	0.4	9	0.3	2(0)	22.2
Unknown.....	1	0.1	3	0.2	4	0.1	1(1)	25.0
Total.....	867	100.0	1976	100.0	2843	100.0	118(33)	4.2
Twins.....	16	1.8	82	4.1	98	3.4	12(5)	12.2
Triplets.....	0	0.0	0	0.0	0	0.0	0(0)	0.0

*Breech Perinatal Mortality

Weight	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
500-999 gm.....	2	6.1	5	5.2	7	5.4	7	100.0
1000-1499 gm.....	2	6.1	14	14.2	16	12.3	8	50.0
1500-1999 gm.....	2	6.1	18	18.6	20	15.4	2	10.0
2000-2499 gm.....	5	15.2	17	12.5	22	16.9	3	13.6
2500 gm. & over.....	22	66.7	43	44.3	65	50.0	2	3.1
Total.....	33	100.0	97	100.0	130	100.0	22	16.9

Mortality 1000 grams and over — 12.2%.

VIII. METHOD OF DELIVERY—TOTAL INFANTS

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
A. Vaginal Deliveries								
1. Total forceps deliveries.....	475	54.8	683	34.6	1158	40.7	17(1)	1.5
Low forceps, elective.....	329	37.9	506	25.6	835	29.4	8(0)	1.0
Low forceps, indicated.....	0	0.0	1	0.1	1	0.1	0(0)	0.0
Mid forceps, elective.....	143	16.5	174	8.8	317	11.2	8(0)	2.5
Mid forceps, indicated.....	2	0.2	2	0.1	4	0.1	0(0)	0.0
High forceps.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Vacuum extractor, elective....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Vacuum extractor, indicated..	1	0.1	0	0.0	1	0.1	1(1)	100.0
Failed forceps/extractor.....	1	0.1	4	0.2	5	0.2	0(0)	0.0
2. Breech.....	27	3.1	74	3.7	101	3.6	16(4)	15.8
Spontaneous.....	4	0.5	7	0.4	11	0.4	4(2)	36.4
Extraction.....	23	2.7	61	3.1	84	3.0	12(2)	14.3
Decomposition & Extraction..	0	0.0	6	0.3	6	0.2	0(0)	0.0
3. Other operations.....	2	0.2	5	0.3	7	0.2	0(0)	0.0
Version and extraction (single).	0	0.0	2	0.1	2	0.1	0(0)	0.0
Version and extraction								
(second twin).....	0	0.0	2	0.0	2	0.1	0(0)	0.0
Manual rotation, head only...	2	0.2	1	0.1	3	0.1	0(0)	0.0
Rotation of shoulders.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Destructive operations.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
4. Spontaneous.....	322	37.1	1096	55.5	1418	49.9	72(26)	5.1
B. Abdominal Deliveries								
1. Cesarean section.....	41	4.7	118	6.0	159	5.6	13(2)	8.2
2. Rupture of uterus.....	0	0.0	0	0.0	0	0.0	—	—
3. Advanced ectopic pregnancy..	0	0.0	0	0.0	0	0.0	—	—

IX. ANCILLARY OPERATIVE PROCEDURES FOR LABOR AND DELIVERY

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
A. Induction of Labor								
Oxytocic.....	73	8.4	52	2.6	125	4.4	5(2)	4.0
Rupture of membranes.....	2	0.2	0	0.0	2	0.1	0(0)	0.0
Rupture of membranes and oxytocic.....	0	0.0	1	0.1	1	0.1	0(0)	0.0
Stripping of membranes.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Stripping of membranes and oxytocic.....	1	0.1	4	0.2	5	0.2	0(0)	0.0
Total Inductions.....	76	8.8	57	2.9	133	4.7	0(0)	3.8
(Perinatal mortality over 1000 grams.)								
Total Elective Inductions....	53	6.1	8	0.4	61	2.1	0(0)	0.0
B. Miscellaneous								
Decompression of hydrocephalus..	0	0.0	0	0.0	0	0.0	0(0)	0.0
Forceps to after-coming head....	12	1.4	17	0.9	29	1.0	2(1)	6.9
Manual removal of placenta, elective.....	33	3.8	17	0.9	50	1.8		
Manual removal of placenta, indicated.....	10	1.2	25	1.3	35	1.2		
Oxytocic stimulation of labor....	59	6.8	55	2.8	114	4.0	8(3)	7.0
(Perinatal mortality over 1000 grams 4.5%.)								
Elective Oxytocic Stimulation..	45	5.2	28	1.4	73	2.6	4(2)	5.5
Transfusion(s).....	16	1.8	57	2.9	73	2.6		
Exploration of Uterus.....	5	0.6	12	0.6	17	0.6		
C. Episiotomies and Lacerations								
Median.....	623	71.9	975	49.3	1598	56.2		
3rd degree lacerations.....	16	2.6	25	2.6	41	2.6		
4th degree lacerations.....	7	1.1	16	1.6	23	1.4		
Mediolateral.....	53	6.1	94	9.6	148	5.9		
3rd degree lacerations.....	2	3.8	3	3.2	5	3.4		
4th degree lacerations.....	1	1.9	1	1.1	2	1.4		
Total Episiotomies.....	676	78.0	1069	54.1	1745	61.4		
3rd degree laceration spontaneous, repair of.....	2	0.2	6	0.3	8	0.3		
4th degree laceration spontaneous, repair of.....	0	0.0	2	0.1	2	0.1		
Cervical laceration, repair of....	22	2.5	27	1.4	49	1.7		
Vaginal laceration, repair of....	4	0.5	5	0.3	9	0.3		
D. Other procedures								
Adnexal oper.....	0	0.0	1	0.1	1	0.1	0(0)	0
Appendectomy, ind.....	1	0.1	2	0.1	3	0.1	0(0)	0
Other surg. oper.....	11	1.3	11	0.6	22	0.8	1(0)	4.5

X. PUERPERAL MORBIDITY

	White		Non-White		Total	
	No.	%	No.	%	No.	%
One Day Fever.....	34	3.9	138	7.0	172	6.0
Standard Fever.....	40	4.6	225	11.4	265	9.3
Total.....	74	8.5	363	18.4	437	15.3
Infection						
Endometritis.....	15	1.7	116	5.9	131	4.6
Wound Infection.....	0	0.0	3	0.2	3	0.1
Urinary Tract.....	7	0.8	32	1.6	39	1.4
Respiratory Diseases.....	0	0.0	0	0.0	0	0.0
Thrombophlebitis.....	3	0.3	3	0.2	6	0.2
Other Infections.....	0	0.0	2	0.1	2	0.1
Other Complications						
Urinary Comp.....	8	0.9	44	2.2	52	1.8
Thrombosis-Embolus.....	0	0.0	1	0.1	1	0.1
Wound Dehiscence.....	3	0.3	4	0.2	7	0.2
Neuropsychiatric.....	2	0.2	1	0.1	3	0.1
Total.....	13	1.5	50	2.5	63	2.2

XI. COMPLICATIONS

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
A. Antepartum Hemorrhage								
Placenta previa.....	5	0.6	15	0.8	20	0.7	4(0)	20.0
Abruptio placentae.....	8	0.9	28	1.4	36	1.3	13(3)	36.1
Rupture of uterus.....	0	0.0	1	0.1	1	0.1	0(0)	0.0
Traumatic.....	0	0.0	1	0.1	1	0.1	0(0)	0.0
Previous section, severe.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Previous section, incidental....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Other causes.....	3	0.3	14	0.7	17	0.6	6(2)	35.3
Total.....	16	1.8	58	2.9	74	2.6	23(5)	30.7
B. Postpartum hemorrhage								
Early.....	29	3.3	89	4.5	118	4.2	—	—
Late.....	1	0.1	0	0.0	1	0.0	—	—
Hematomata.....	0	0.0	0	0.0	0	0.0	—	—
Total.....	30	3.4	89	4.5	119	4.2	—	—
C. Anemia								
Less than 5 gm.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
5.0-5.9 gm.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
6.0-6.9 gm.....	0	0.0	2	0.1	2	0.1	1(0)	50.0
7.0-7.9 gm.....	0	0.0	6	0.3	6	0.2	0(0)	0.0
8.0-8.9 gm.....	1	0.1	10	0.5	11	0.4	1(0)	9.1
9.0-9.9 gm.....	18	2.1	171	8.7	189	6.6	14(1)	7.4
10.0-10.9 gm.....	86	9.9	449	22.7	535	18.8	20(6)	3.7
11 gm. and over.....	700	80.7	1229	62.2	1929	67.9	73(20)	3.8
Unknown.....	62	7.2	109	5.5	171	6.0	9(6)	5.3
Total.....	867	100.0	1976	100.0	2843	100.0	118(33)	4.2

XI. COMPLICATIONS (Cont.)

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
D. Toxemia								
Pre-eclampsia—mild.....	16	1.8	75	3.8	91	3.2	1(0)	1.1
Pre-eclampsia—severe.....	0	0.0	7	0.4	7	0.2	1(0)	14.3
Eclampsia—antepartum.....	0	0.0	2	0.1	2	0.1	0(0)	0.0
Eclampsia—intrapartum.....	1	0.1	1	0.1	2	0.1	0(0)	0.0
Eclampsia—postpartum.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Total acute.....	17	1.9	85	4.3	102	3.6	2(2)	2.0
Chronic hypertension with toxemia.....	2	0.2	15	0.8	17	0.6	5(1)	29.4
Chronic hypertension without toxemia.....	31	3.6	137	6.9	168	5.9	11(1)	6.5
Total chronic.....	33	3.8	152	7.7	185	6.5	16(2)	8.6
Unclassified.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Total Toxemia.....	50	5.7	237	12.0	287	10.1	18(2)	6.3
E. Medical Complications								
Heart disease.....	1	0.1	8	0.4	9	0.3	2(1)	22.2
No failure.....	1	0.1	8	0.4	9	0.3	2(1)	22.2
Failure.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Tuberculosis, pulmonary.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Viral pulmonary disease.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Other pulmonary disease.....	2	0.2	3	0.2	5	0.2	1(1)	20.0
Uncommon anemias.....	0	0.0	9	0.5	9	0.3	1(0)	11.0
Oliguria/anuria.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Pyelonephritis.....	6	0.7	6	0.3	12	0.4	1(0)	8.3
Rh Negatives.....	154	17.8	111	5.6	265	9.3	6(2)	2.3
Rubella.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Diabetes.....	4	0.5	11	0.6	15	0.5	5(3)	33.3
Abnormal glucose tol. test.....	7	0.8	9	0.5	16	0.6	2(0)	12.5
F. Cord Pathology								
Prolapse—Vaginal deliveries.....	3	0.3	6	0.3	9	0.3	2(2)	22.2
Prolapse—Abdominal deliveries.....	3	0.3	6	0.3	9	0.3	2(2)	22.2
Other.....	3	0.3	2	0.1	5	0.2	1(0)	20.0
G. Intrapartum Fever.....	10	1.2	38	1.9	48	1.7	5(3)	10.4
H. Uterine Dysfunction.....	22	2.5	47	2.6	69	2.4	2(0)	2.9
I. Labor Over 20 Hours—Method of Delivery								
Cesarean section.....	2	0.2	6	0.3	8	0.3	1(0)	12.5
Spontaneous.....	5	0.6	9	0.5	14	0.5	2(0)	14.3
Low forceps, elective.....	8	0.9	20	1.0	28	1.0	1(0)	3.6
Low forceps, indicated.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Mid forceps, elective.....	3	0.3	6	0.3	9	0.3	0(0)	0.0
Mid forceps, indicated.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Breech.....	1	0.1	3	0.2	4	0.1	0(0)	0.0
Other.....	0	0.0	0	0.0	0	0.0	0(0)	0.0
Total.....	19	2.2	44	2.2	63	2.2	4(0)	6.3
J. Shoulder Dystocia.....	1	0.1	11	0.6	12	0.4	1(1)	8.3
K. Contracted Pelvis.....	12	1.4	53	2.7	65	2.3	4(2)	6.2

XII. ABDOMINAL OPERATIONS

	White		Non-White		Total		Perinatal Mortality	
	Prim.	Repeat	Prim.	Repeat	Prim.	Repeat	Prim. %	Repeat %
A. Cesarean Sections								
Low cervical.....	17	9	45	30	62	39	4.8	2.6
Low cervical and sterilization....	3	4	2	6	5	10	0.0	0.0
Classical.....	2	1	16	8	18	9	33.3	22.2
Classical and sterilization.....	3	1	1	9	4	10	25.0	0.0
Extraperitoneal.....	0	0	0	0	0	0	0.0	0.0
Cesarean hysterectomy.....	1	0	1	0	2	0	0.0	0.0
Total Sections.....	26	15	65	53	91	68	11.0	4.4
<i>Indications</i>								
1. Pelvic contractions and mechanical dystocia								
Contracted pelvis.....	4	1	8	19	12	20	0.0	0.0
Large fetus.....	0	0	1	0	1	0	0.0	0.0
Uterine inertia.....	3	0	14	1	10	1	0.0	0.0
Malpresentation.....	3	0	4	1	7	1	0.0	0.0
Breech.....	2	0	0	0	2	0	0.0	0.0
Face.....	0	0	0	0	0	0	0.0	0.0
Brow.....	0	0	0	0	0	0	0.0	0.0
Transverse.....	1	0	2	1	3	1	0.0	0.0
Compound or other.....	0	0	2	0	2	0	0.0	0.0
Tumor blocking birth canal.....	0	0	1	0	1	0	0.0	0.0
Total.....	10	1	28	21	38	22	0.0	0.0
2. Previous uterine surgery								
Previous cesarean section.....	0	13	0	28	0	41	0	0.0
Previous myomectomy.....	0	0	0	0	0	0	0	0.0
Previous hysterotomy.....	0	0	0	0	0	0	0	0.0
Total.....	0	13	0	28	0	41	0	0.0
3. Hemorrhage								
Abruptio placentae.....	2	1	12	2	14	3	42.9	33.3
Placenta previa.....	5	0	13	0	18	0	16.7	0.0
Total.....	7	1	25	2	32	3	28.1	33.3
4. Toxemia								
Pre-eclampsia.....	0	0	2	0	2	0	0.0	0.0
Eclampsia.....								
Chronic hypertension and toxemia.....	0	0	1	0	1	0	0.0	0.0
Chronic hypertension.....								
Total.....	0	0	3	0	3	0	0.0	0.0
5. Intercurrent diseases								
Diabetes.....	0	0	2	0	2	0	0.0	0.0
6. Miscellaneous Total.....								
Other.....	3	0	0	0	3	0	0.0	0.0
Fetal distress.....	0	0	2	0	2	0	0.0	0.0
Prolapsed cord.....	3	0	3	2	6	2	0.0	100.0
Intrapartum Inf.....	1	0	1	0	2	0	50.0	0.0
Carcinoma.....	2	0	0	0	2	0	0.0	0.0
Rh Incompatibility.....	0	0	1	0	1	0	0.0	0.0

XII. ABDOMINAL OPERATIONS (Cont.)

	White	Non-White	Total	Perinatal Mortality	
				No.	%
B. Cesarean Hysterectomy	1	1	2	0(0)	0.0
Indications for Hysterectomy					
Ca. in situ	1	0	1	0(0)	0.0
Hemorrhage	0	1	1	0(0)	0.0
C. Puerperal Hysterectomy	3	3	6		
Indications					
Sterilization	1	1	2		
Placenta Accreta	1	1	2		
Subinvolution	1	0	1		
Rupture of Uterus	0	1	1		
D. Laparotomies					
Advanced ectopic pregnancy	0	0	0		
Rupture of uterus	0	0	0		

XIII. DELIVERIES (INFANTS) WITH PREVIOUS SECTION

	White		Non-White		Total		Perinatal Mortality	
	No.	%	No.	%	No.	%	No.	%
Repeat section	15	1.7	53	2.7	68	2.4	3(2)	4.4
Vaginal deliveries								
Spontaneous	2	0.2	9	0.5	11	0.4	2(1)	18.2
Low forceps, elective	0	0.0	2	0.1	2	0.1	0(0)	0.0
Low forceps, indicated	0	0.0	0	0.0	0	0.0	0(0)	0.0
Mid forceps, elective	1	0.1	2	0.1	3	0.1	0(0)	0.0
Breech, spontaneous	0	0.0	0	0.0	0	0.0	0(0)	0.0
Breech, extraction	0	0.0	0	0.0	0	0.0	0(0)	0.0
Breech, decomposition & extraction	0	0.0	0	0.0	0	0.0	0(0)	0.0
Other (specify) (Vac. ext.)	1	0.1	0	0.0	1	0.1	1(1)	100.0
Total	19	2.2	66	3.3	85	3.0	6(4)	7.1

XIV. THERAPEUTIC ABORTIONS—NONE

XV. STERILIZATION

	White	Non-White	Total
	No.	No.	No.
Type of Operation			
Tubal, puerperium	33	11	44
Tubal, not pregnant	0	0	0
Accompanying cesarean section	11	18	29
Accompanying therapeutic abortion	0	0	0
Hysterectomy, with cesarean section	1	1	2
Hysterectomy, not pregnant	1	1	2
X-ray	0	0	0
Total	46	31	77
Indications for Sterilization			
Multiple Cesarean Sections	3	15	18
Multiparity	40	14	54
Other	3	2	5
Total	46	31	77

XVI. ADULT DEATHS

Total Births.....	2843
Maternal deaths.....	0
Rate per 1000 births.....	0.0
Total registered births.....	2616
Maternal deaths (Registered patients).....	0
Rate per 1000 registered births.....	0.0

XVII. MALFORMATIONS

	White	Non-White	Total	Perinatal Mortality	
				No.	%
Club Foot.....	0	2	2	1(0)	50.0
Polydactylism.....	1	11	12	3(0)	25.0
Undescended Testis.....	3	1	4	1(0)	25.0
Hypospadias.....	1	1	2	0(0)	0.0
Umbilical Hernia.....	0	4	4	1(0)	25.0
Cleft Palate.....	1	0	1	0(0)	0.0
CNS.....	0	9	9	1(0)	11.1
Cardiovascular.....	9	13	22	8(0)	36.4
Gastrointestinal.....	2	3	5	4(1)	80.0
Other.....	1	16	17	9(0)	52.9
Total.....	17	48	65	18(1)	27.7

XVIII. CAUSE OF PERINATAL DEATH

	White	Non-White	Total
Analgesia/anesthesia.....	0	0	0
Anomaly.....	2	11	13
Anoxia—Maternal.....	0	5	5
Anoxia—Obst.....	11	38	49
Anoxia—Unknown.....	1	6	7
Infection—Infant.....	0	3	3
Infection—Maternal.....	0	0	0
Isoimmunization.....	0	0	0
Respiratory Disease.....	6	35	41
Trauma.....	0	0	0
Other.....	0	0	0
Total.....	20	98	118

XIX. INFANTS DELIVERED

A. Total Live Births According to Weight and Condition at Discharge

Birth Weight Grams	White			Non-White			Total		
	Live Births	Died	%	Live Births	Died	%	Live Births	Died	%
500-999.....	3	2	66.7	19	19	100.0	22	21	95.5
1000-1499.....	6	1	16.7	38	14	36.8	44	15	34.1
1500-1999.....	15	3	20.0	74	5	6.8	89	8	9.0
2000-2499.....	51	1	2.0	216	6	2.8	267	7	2.6
2500 and over.....	781	2	0.3	1588	13	0.8	2369	15	0.6
Total.....	856	9	1.1	1935	57	2.9	2791	66	2.4

B. Total Stillbirths According to Weight

Birth Weight Grams	White			Non-White			Total		
	Total Births	Still-births	%	Total Births	Still-births	%	Total Births	Still-births	%
500-999.....	7	4	57.1	27	8	29.6	34	12	35.3
1000-1499.....	7	1	14.3	54	16	29.6	61	17	27.9
1500-1999.....	17	2	11.8	80	6	7.5	97	8	8.2
2000-2499.....	52	1	1.9	221	5	2.3	273	6	2.2
2500 and over.....	784	3	0.4	1594	6	0.4	2378	9	0.4
Total.....	867	11	1.3	1976	41	2.1	2843	52	1.8

C. Total Perinatal Deaths According to Weight

Birth Weight Grams	White			Non-White			Total		
	Total Births	Peri-natal Deaths	%	Total Births	Peri-natal Deaths	%	Total Births	Peri-natal Deaths	%
500-999.....	7	6	85.7	27	27	100.0	34	33	97.1
1000-1499.....	7	2	28.6	54	30	55.6	61	32	52.5
1500-1999.....	17	5	29.4	80	11	13.8	97	16	16.5
2000-2499.....	52	2	3.8	221	11	5.0	273	13	4.5
2500 and over.....	784	5	0.6	1594	19	1.2	2378	24	1.0
Total.....	867	20	2.3	1976	98	5.0	2843	118	4.2

GYNECOLOGIC REPORT

I. DISCHARGES PER PATIENT

	1	2	3	4	5	Total
Number of Patients.....	842	95	18	4	1	960

II. GENERAL DISCHARGE TYPE

	Ward	Private	Total
Number of discharges.....	644	463	1107
A. Gynecologic benign.....	368	272	639
1. Surgical.....	267	183	450
a. Minor, single.....	79	55	134
b. Minor, multiple.....	4	18	22
c. Major, single.....	178	103	281
d. Major, multiple.....	6	7	13
2. Non-operative.....	44	15	59
3. For diagnosis only.....	57	74	131
B. Gynecologic cancer.....	147	79	226
C. Pregnancy complications.....	114	93	207
D. Miscellaneous.....	15	19	34

III. DEATHS

	Ward	Private	Total
A. Operative.....	0	1	1
B. Non-operative.....	0	0	0
C. Diagnosis only.....	0	0	0
D. Cancer.....	9	0	9
E. Pregnancy complications.....	0	0	0
F. Miscellaneous.....	0	0	0
Total.....	9	1	10

IV. TRANSFERS

	Ward	Private	Total
Number.....	10	5	15

V. PRIMARY AND SECONDARY GYNECOLOGIC DIAGNOSIS

A. Vulva

Diagnosis	Primary	Secondary
Abscess, Bartholin's gland.....	2	0
Adenitis, Bartholin's gland.....	1	0
Adenocarcinoma.....	0	4
Condylomata.....	3	1
Cyst, Bartholin's gland.....	9	2
Granuloma inguinale.....	2	0
Leukoplakia.....	1	0
Lipoma.....	2	1
Pseudo-epithelioma.....	1	0
Sebaceous cyst, vulva.....	0	2
Total.....	21	10

V. PRIMARY AND SECONDARY GYNECOLOGIC DIAGNOSIS (Cont.)

B. Vagina

Diagnosis	Primary	Secondary
Atresia.....	1	0
Carcinoma, metastatic..	0	2
Cyst, Gartner's duct...	1	1
Cyst, inclusion.....	0	1
Cystocele.....	36	56
Enterocele.....	0	2
Fistula, rectovaginal trauma.....	3	1
Fistula, rectovaginal tumor.....	0	2
Hematocolpos.....	1	0
Hematoma.....	2	0
Rectocele.....	13	60
Stricture.....	1	1
Syphilis.....	0	1
Tear, 4th degree.....	3	1
Tear, incomplete.....	1	0
Trichomonas.....	0	1
Vaginitis, senile.....	0	1
Total.....	62	130

C. Cervix

Diagnosis	Primary	Secondary
Carcinoma, metastatic..	0	1
Cervicitis, acute.....	0	4
Cervicitis, chronic.....	21	150
Cyst, Nabothian.....	0	3
Endometriosis.....	1	0
Epidermoid carcinoma..	0	1
Laceration.....	1	0
Myoma, cervix.....	2	1
Polyp.....	13	2
Total.....	38	162

D. Tubes

Diagnosis	Primary	Secondary
Abscess, tubo-ovarian (intact).....	11	4
Abscess, tubo-ovarian (rupture).....	2	0
Endometriosis.....	0	3
Etiology, unknown.....	1	0
Hematosalpinx.....	0	1
Hydrosalpinx.....	3	12
Metastatic carcinoma..	0	1
Perisalpingitis, acute...	1	0
Perisalpingitis, chronic..	1	1
Pyosalpinx.....	1	4
Salpingitis, acute.....	10	7
Salpingitis, chronic.....	3	31
Salpingitis, tuberculous.	1	0
Total.....	34	64

E. Uterus

Diagnosis	Primary	Secondary
Adenocarcinoma.....	0	2
Adenomyosis.....	3	7
Anomaly.....	0	1
Carcinoma, metastatic..	0	4
Endometritis, acute....	2	3
Endometritis, chronic...	1	0
Endometritis, tuberculous.....	0	2
Endometrium, atrophic..	0	10
Endometrium, hyperplastic.....	5	9
Endometrium, proliferative.....	2	67
Endometrium, secretory.....	2	43
Fibromyomata.....	114	30
Foreign body.....	0	1
Parametritis.....	1	1
Polyp, endometrial.....	10	10
Pregnancy, intrauterine.	0	5
Prolapse.....	21	19
Retroversion.....	2	3
Rupture.....	1	0
Total.....	164	217

F. Ovary

Diagnosis	Primary	Secondary
Abscess.....	1	0
Cyst, corpus luteum....	9	7
Cyst, dermoid.....	1	2
Cyst, follicular.....	3	3
Cyst, lutein.....	0	1
Cyst, paroophoron.....	1	2
Cyst, simple.....	2	1
Cyst, undetermined....	6	5
Cystadenoma, pseudomucinous.....	3	0
Cystadenoma, serous...	5	1
Endometriosis.....	1	0
Fibroma.....	1	0
Oophoritis, acute.....	1	1
Ovaries, polycystic (S. L. Disease).....	9	1
Total.....	43	24

V. PRIMARY AND SECONDARY GYNECOLOGIC DIAGNOSIS (Cont.)

G. Other Gynecologic Diseases

Diagnosis	Primary	Secondary
Abscess, pelvic.....	11	3
Amenorrhea, hypothalamic.....	4	1
Bleeding, functional uterine.....	125	11
Bleeding, post- menopausal.....	21	1
Cellulitis, pelvic.....	6	2
Infertility.....	1	4
Mass, adnexal.....	2	1
Peritonitis, pelvic.....	0	1
Pseudohermaphrodit- ism, female.....	1	0
Sterility.....	1	0
Sterilization.....	97	4
Thrombophlebitis, pelvic.....	2	0
Total.....	271	28

VI. CANCER (Based on Patients)

A. Vulva

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Epidermoid.....	3	0	0	0	3
2. Complications	Number				
Urethra stricture.....	1				

B. Vagina

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Epidermoid.....	1	0	0	1	0

C. Cervix

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Adenocarcinoma.....	4	1	0	0	3
Carcinoma in situ.....	16	1	8	0	7
Squamous cell.....	86	43	10	3	30
Total.....	106	45	18	3	40

VI. CANCER (Based on Patients) (Cont.)

C. Cervix (Cont.)

2. Complications	Number
Abscess, pelvic.....	1
Cystitis, chronic.....	1
Fistula, vesicovaginal (tumor).....	1
Hydronephrosis.....	7
Hydroureter.....	8
Lymph nodes in groin, metastatic....	1
Lymph nodes in pelvis, metastatic....	25
Lymph nodes out of pelvis, metastatic.	16
Pregnancy.....	3
Proctitis, acute.....	1

D. Uterus

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Adenocarcinoma	19	1	1	10	7
Mixed Mesodermal	1	0	0	0	1
Sarcoma	1	0	1	0	0
Total	21	1	2	10	8
2. Complications	Number				
Lymph nodes in pelvis, metastatic . . .	1				
Lymph nodes out of pelvis, metastatic . . .	1				

E. Tubes

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Carcinoma.....	1	0	0	0	1
2. Complications	Number				
Lymph nodes in pelvis, metastatic ..	1				

F. Ovary

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Adenocarcinoma.....	3	1	0	0	2
Brenner.....	2	0	0	0	2
Cystadenocarcinoma, pseudomucinous.....	2	0	0	0	2
Cystadenocarcinoma, serous.....	4	0	1	0	3
Granulosa cell.....	1	0	0	0	1
Teratoma.....	2	0	1	0	1
Total.....	14	1	2	0	11
2. Complications	Number				
Ascites.....	3				
Lymph nodes in pelvis, metastatic...	6				
Lymph nodes out of pelvis, metastatic	5				

VI. CANCER (Based on Patients) (Cont.)

G. Unknown Sources

1. Diagnosis	Number of Patients	Irradiated	Operations	Irradiated and Operated	Medical
Lymph nodes, pelvis.....	1	1	0	0	0
Lymph nodes, groin.....	0	0	0	0	0
Sarcoma.....	1	1	0	0	0
Total.....	2	2	0	0	0

2. Complications	Number	
Lymph nodes, pelvis.....	1	
Lymph nodes, groin.....	1	

VII. PREGNANCY COMPLICATIONS

Diagnosis	Number of Patients
Abortion, incomplete.....	147
Cervix, incompetent.....	2
Infection, puerperal.....	1
Mastitis, postpartum.....	3
Mole, hydatid.....	5
Pregnancy, intrauterine.....	22
Pregnancy, tubal, ruptured.....	15
Pregnancy, tubal, unruptured.....	3
Sucundines, retained.....	5
Subinvolution, Placental Site.....	5
Total.....	208

VIII. OTHER SYSTEMS—DIAGNOSIS

A. Rectum

Diagnosis	Primary	Secondary
Carcinoma.....	1	2
Diverticulitis.....	1	0
Other.....	1	0
Total.....	3	2

B. Urethra

Diagnosis	Primary	Secondary
Carcinoma.....	1	0
Caruncle.....	3	0
Other.....	1	0
Skene's Gland Disease..	1	0
Stricture.....	1	4
Urethritis, chronic.....	2	3
Urethrocele.....	0	1
Total.....	9	8

C. Bladder

Diagnosis	Primary	Secondary
Carcinoma, metastatic..	1	0
Carcinoma, primary....	4	1
Cystitis, acute.....	4	0
Cystitis, chronic.....	5	2
Polyp.....	1	0
Total.....	15	3

D. Ureters

Diagnosis	Primary	Secondary
Anomaly.....	0	1
Hydroureter.....	0	5
Total.....	0	6

VIII. OTHER SYSTEMS—DIAGNOSIS (Cont.)

E. Kidneys

Diagnosis	Primary	Secondary
Calculus.....	3	2
Hematuria.....	1	0
Hydronephrosis.....	0	7
Pyelonephritis, acute...	2	0
Pyelonephritis, chronic..	0	4
Pyelonephritis, tuberculous.....	1	0
Total.....	7	13

F. Abdominal Diseases

Diagnosis	Primary	Secondary
Adhesions, Peritoneal...	2	19
Endometriosis, site unspecified.....	2	1
Hematoma, ant. abd. wall, inf....	1	0
Hernia, incisional.....	1	0
Ileus, paralytic.....	0	2
Lymph nodes out of pelvis.....	0	1
Obstruction, small intestine.....	0	1
Peritonitis, abdominal..	0	2
Foreign body.....	1	0
Total.....	7	26

IX. OPERATIVE PROCEDURES

A. Vulva

Diagnosis	Number of Patients
Bartholin Gland, excision.....	10
Bartholin Gland, I.& D.....	2
Biopsy.....	1
Hymenotomy.....	2
Local Excision of Vulva.....	2
Other.....	8
Vulvectomy, radical.....	1
Total.....	26

C. Uterus & Cervix

Diagnosis	Number of Patients
Cervix, biopsy.....	299
Conization.....	28
Dilation, cervix.....	3
D&C, uterus, diagnostic.....	342
D&C, uterus, incomplete abortion..	135
Excision, local, cervix.....	6
Fundectomy.....	1
Hysterectomy, radical and lymph node.....	1
Hysterectomy, subtotal.....	7
Hysterectomy, total abdominal....	143
Hysterectomy, total vaginal.....	55
Hysteromyomectomy.....	4
Hysteropexy, Manchester type.....	3
Hysteropexy, other types.....	1
Hysterosalpingostomy.....	1
Other.....	1
Pelvic exenteration, complete.....	4
Radioactive substance inserted into cervix.....	60
Radioactive substance inserted into uterus.....	61
Trachelectomy.....	5
Trachelorrhaphy.....	4
Uterus, insufflation of.....	5
Total.....	1169

B. Vagina

Diagnosis	Number of Patients
Biopsy.....	4
Closure of rectovaginal fistula.....	3
Colpectomy, partial.....	4
Colpoperineorrhaphy.....	3
Colpoplasty, anterior.....	17
Colpoplasty, posterior.....	5
Colpoplasty, anterior and posterior.	63
Colporrhaphy.....	1
Colpotomy, diagnostic.....	23
Colpotomy, drainage.....	4
Other.....	9
Perineorrhaphy.....	3
Radioactive substances, insertion of.	28
Total.....	167

IX. OPERATIVE PROCEDURES (Cont)

D. Tubes

Diagnosis	Number of Patients
Ligation.....	4
Salpingectomy, unilateral, partial...	9
Salpingectomy, bilateral, partial....	71
Salpingectomy, unilateral, complete..	12
Salpingectomy, bilateral, complete..	7
Salpingo-oophorectomy, unilateral...	16
Salpingo-oophorectomy, bilateral...	7
Salpingoplasty.....	2
Total.....	128

E. Urinary System

Diagnosis	Number of Patients
Bladder, biopsy.....	2
Cystorrhaphy.....	1
Cystoscopy, diagnostic.....	101
Cystoscopy, therapeutic.....	6
Cystotomy.....	1
Ileal loop.....	2
Total.....	113

F. Irradiation

Type	No. of Times
Isotopes.....	17
Radium.....	71
Total.....	88

G. Ovary

Diagnosis	Number of Patients
Biopsy, Wedge Resection.....	17
Cystectomy.....	6
Drainage of ovarian abscess.....	2
Excision, local lesion.....	1
Oophorectomy, bilateral, complete..	1
Oophorectomy, unilateral, complete..	5
Oophorectomy, unilateral, partial...	1
Total.....	33

H. Abdominal and Others

Diagnosis	Number of Patients
Abdominal wall, second suture of...	1
Adhesions, lysis of.....	21
Appendectomy.....	24
Colostomy.....	9
Culdoscopy.....	2
Dissection, radical, groin.....	5
Hemorrhoidectomy.....	1
Herniorrhaphy.....	5
I. & D. of peritoneal cavity.....	1
Laparotomy, exploratory.....	33
Lymph node, biopsy of.....	5
Mesentery, biopsy of.....	1
Miscellaneous.....	23
Omentectomy.....	1
Peritoneocentesis.....	3
Presacral neurectomy.....	1
Proctoscopy.....	30
Total.....	166

X. MORBIDITY AND COMPLICATIONS OF OPERATIONS

A. Minor Single

1. Total	Number	Morbidity	% Morbidity
	498	19	3.8
2. Causes of Morbidity	Number		
Cause unknown.....	14		
Urinary Tract.....	2		
Other.....	3		
Total.....	19		
3. Complications	Number		
Cystitis.....	1		
Secondary anemia.....	3		
Total.....	4		

X. MORBIDITY AND COMPLICATIONS OF OPERATIONS (Cont.)

B. Minor Multiple

1. Total	Number	Morbidity	% Morbidity
	65	4	6.2
2. Causes of Morbidity	Number		
Cause unknown	4		
3. Complications	None		

C. Major Single

1. Total	Number	Morbidity	% Morbidity
	375	124	33.1
2. Causes of Morbidity	Number		
Abdominal wound infection	9		
Cause unknown	56		
Infected perineum	1		
Pelvic abscess	2		
Peritonitis	8		
Pulmonary	9		
Urinary tract	33		
Other	6		
Total	124		
3. Complications	Number		
Coronary disease	1		
Cystitis	7		
Evisceration	1		
Fistulae	1		
Paralytic ileus	17		
Postoperative hemorrhage	3		
Respiratory disease	13		
Secondary anemia	8		
Transfusion reaction	1		
Uremia	1		
Urinary retention	5		
Wound breakdown	2		
Wound infection	11		
Other	31		
Total	102		

X. MORBIDITY AND COMPLICATIONS OF OPERATIONS (Cont.)

D. Major Multiple

1. Total	Number	Morbidity	% Morbidity
	17	8	47.1
2. Causes of Morbidity	Number		
Abdominal wound infection.....	1		
Causes unknown.....	1		
Pulmonary.....	3		
Urinary tract.....	2		
Other.....	1		
Total.....	8		
3. Complications	Number		
Paralytic ileus.....	2		
Postoperative hemorrhage.....	1		
Respiratory disease.....	1		
Secondary anemia.....	2		
Wound breakdown.....	2		
Wound infection.....	2		
Other.....	2		
Total.....	12		

DEATHS

- D.G. UH-02-50-47, 37 yr. old C.F. ad. 2/9/63 because of Terminal Carcinoma of the Ovary. Died 2/20/63.
- M.S. UH-06-15-33, 74 yr. old C.F. ad. 3/21/63 because of Adenocarcinoma of the Endometrium treated with radium. Had sudden death and autopsy demonstrates femoral thrombophlebitis and pulmonary embolus. Died 4/2/63.
- E.W. UH-27-09-88, 31 yr. old C.F. ad. 5/15/63 because of Terminal Carcinoma of Cervix. Died 5/25/63.
- M.B. UH-27-30-38, 40 yr. old W.F. ad. 7/16/63 because of Terminal Carcinoma of the Cervix. Died 8/3/63.
- M.W. UH-27-81-73, 52 yr. old W.F. ad. 9/30/63 because of Terminal Carcinoma of the Cervix. Died 10/16/63.
- M.Y. UH-27-78-97, 68 yr. old C.F. ad. 9/25/63 for Total Abdominal Hysterectomy, Bilateral Salpingo-oophorectomy, and Lysis of Adhesions, operated on 10/2/63. Died 10/11/63. Diagnosis: Acute dilatation of stomach and paralytic ileus.
- H.C. UH-26-82-29, 33 yr. old C.F. ad. 11/17/63 because of Terminal Carcinoma of the Cervix. Died 11/26/63.
- R.F. UH-03-32-11, 53 yr. old W.F. ad. 11/12/63 because of Terminal Carcinoma of the Cervix. Died 11/29/63.
- P.E. UH-21-91-00, 19 yr. old C.F. 11/25/63 because of advanced Pseudomucinous Cystadenocarcinoma of Ovary. Died 12/14/63.
- B.J. UH-02-52-00, 64 yr. old C.F. ad. 11/29/63 because of advanced Carcinoma of the Cervix. Died 12/25/63.



Dean's
LETTER

*Dear Members of the Alumni, Students, and Friends
of the Medical School:*

There is much discussion these days about the differences in objectives of medical schools and hospitals. Some individuals contend that the objectives of the medical schools in teaching and research are at variance with hospital objectives of patient care and community service. Most of these differences center around the definition of patient care.

The hospital administrator and most lay boards of trustees look on patient care as the environment a patient is treated in and the patient's reaction to that environment. These aspects are very important but do not include the diagnosis of the patient's ills and the therapy.

The patient is brought to the hospital by a physician for diagnosis and treatment of disease and injury. The accuracy of the diagnosis and the effectiveness of the treatment determine to a major extent whether or not the patient makes a recovery, a partial recovery, or has a fatal termination.

It is obvious that both the diagnosis and therapy of the physician, the assistance of the ancillary health professions and technical personnel, and the environment are essential for patient care. The teaching of these roles and their inter-relationship are fundamental parts of the medical education of a physician. The improvement of patient care and the prevention of disease and injury are the objectives of medical research. Hospitals and medical schools do not have different objectives—they have shared objectives. How well these objectives are reached determines to a great extent the quality of patient care and the health of the community.

Sincerely,

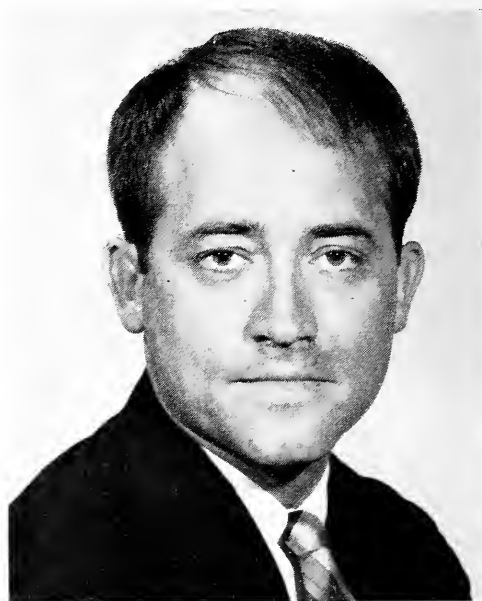
WILLIAM S. STONE, M.D.
Dean

Dr. Erland Nelson Heads Newly Formed Neurology Department

DR. WILLIAM S. STONE, Dean, has announced the creation of a Department of Neurology in the School of Medicine, replacing the division of neurology, formerly a division of the Department of Medicine. Dr. Erland Nelson, assistant professor of neurology at the University of Minnesota School of Medicine, has been named professor of neurology and chairman of the department, replacing Dr. Charles Van Buskirk, who resigned a year ago to enter private practice in York, Pennsylvania.

Dr. Nelson, a native of Blair, Nebraska, received his undergraduate degree in 1947 from Carthage College, Carthage, Illinois. That year he entered the Columbia University College of Physicians and Surgeons in New York, graduating in 1951. From 1951 to 1952 he interned at the University of Chicago Clinics and for the next 2 years served a residency in neurology at the University of Minnesota in Minneapolis, becoming chief of the neurology section and the Electroencephalographic Laboratory in 1955 at the Sampson Air Force Base. From 1956 to 1957 he served as a fellow in neuropathology at the Armed Forces Institute of Pathology in Washington, D. C., returning to the University of Minnesota that year. For the next 2 years he served as instructor in neurology and at the same time continued research and training toward a Doctor of Philosophy degree, this being awarded him in 1961. The next year was spent at the Max Planck Institute for Psychiatry in Munich. In 1961 he returned to the University of Minnesota where he served as assistant professor until his appointment at the University of Maryland.

Dr. Nelson has published more than 30 papers on various neurological and neuropathologic subjects, many of which concern the electron microscopy of neurologic



diseases. He is a member of a number of professional societies including the American Neurological Association, the American Academy of Neurology, the American Association of Neuropathologists, the Minnesota Society of Neurological Sciences, the Central Society for Neurological Research, the Hennepin County Medical Society, the Medical Chirurgical Faculty of Maryland and the Baltimore Neurological Society. He is a diplomate of the American Board of Psychiatry and Neurology and serves as councilor-at-large of the American Association of Neuropathologists. Dr. Nelson also serves as an examiner in neurology for the American Board of Psychiatry and Neurology.

His appointment at the School of Medicine will materially strengthen the neurological disciplines. His recognition in electron microscopy of neurologic diseases will continue with the transfer of his equipment from the University of Minnesota to new laboratories being made available for him in the Howard Hall of the School of Medicine.



Dr. Vernon E. Krah and Dr. Frank H. J. Figge (center left and right) read the Achievement Award presented to Dr. Krah in recognition of his Vascular Research by the Angiology Research Foundation.

Dr. Krah, Anatomy Department, Given Honors Achievement Award

DR. VERNON E. KRAHL, Department of Anatomy of the School of Medicine, received an honors achievement award from the Angiology Research Foundation, Inc., in ceremonies held in the Dean's office on October 20, 1964. The award recognized the vascular research of Dr. Krah, professor of anatomy at the School of Medicine. One of his studies based on observations through a window installed in the chest wall of a rabbit was published in the journal *Angiology*. The article was se-

lected by a panel of judges as the outstanding paper published in the journal in the past five years. Dr. Krah, affiliated with the School of Medicine since 1940, is well known for his work in the finer structure and function of the lung. Dr. Krah has won a research career award from the National Institutes of Health. He was the first scientist to film the living lung of a rabbit through a window device. His movies have been shown to medical audiences throughout the world.

Other Faculty Appointments

DR. JOHN M. DENNIS, professor of radiology, was recently elected president of the Maryland Division of the American Cancer Society.

Dr. Frank H. J. Figge serves as chairman of the board of directors and Dr. George H. Yeager as vice chairman. Other members of the Maryland Division Board of Directors include Doctors Harlan I.

Firminger, William S. Stone, John D. Young, Everett S. Diggs, Arthur Haskins, and John A. Wagner.

DR. SAFUJI ATTAR, assistant professor of thoracic surgery, has announced the transfer of his practice for thoracic and cardio-vascular surgery to the Bressler Building (Room 300) at 29 South Greene Street, Baltimore, Md.

Faculty

NOTES

AMONG the participants in the Ninth Annual Postgraduate Institute of the West Virginia Chapter of the American Academy of General Practice, recently held in Martinsburg, W. Va., Dr. Charles Van Buskirk, clinical professor of neurology, spoke on the significance of intellectual deterioration, Dr. John D. Young, professor of urological surgery, spoke on the etiology and medical management of urinary calculi, and Dr. Samuel Bessman, professor of research, spoke on recent advances in diabetes.

DR. RICHARD D. RICHARDS, professor of ophthalmology at the School of Medicine, has been appointed associate director of the Eye Research Foundation of Bethesda, Maryland. This organization has been affiliated with the School of Medicine since March 1964. The announcement was made jointly by Dean William S. Stone and Dr. William M. Hart, director of the foundation. The affiliated organizations have been working together closely this year and Dr. Richards plans to establish a training program for ophthalmology residents at the foundation within a few months. The Eye Research Foundation is a nonprofit organization set up under a trust fund about seven years ago and occupies an imposing building near the National Institutes of Health in Bethesda, Maryland.

Dr. Harlan I. Firminger, professor and head of pathology, discussed clinical misconceptions revealed by autopsy studies.

Dr. Louis A. M. Krause, professor of medicine, spoke on the general subject of physical diagnosis.

Dr. Mosberg Honored

DR. WILLIAM H. MOSBERG, assistant professor of neurological surgery, has been named president elect of the Congress of Neurological Surgery. Dr. Mosberg has also served as editor of *Clinical Neurosurgery*, the proceedings of the Congress.

Undertakes Far Eastern Survey

Under the joint auspices of the Congress of Neurologic Surgeons, the Department of Health, Education and Welfare and Medico, Dr. Mosberg left on January 2nd for a tour of the Far East including Egypt, the Arab Nations, India, and Malaya. On this journey, Dr. Mosberg will survey facilities for training and education in neurologic surgery as well as opportunities for assistance in the development of neurosurgical centers in these countries. He has been scheduled to perform demonstration operations and to give several scientific papers, one of which will be given in Delhi, India, in conjunction with a meeting of the Indian Association for the Advancement of Medical Education.

Faculty Participate in Eighth Inter-American Congress of Radiology

DR. FERNANDO G. BLOEDORN, professor of radiology, served as chairman of a round table discussion on preoperative irradiation for the treatment of cancer on the occasion of the Eighth Inter-American Congress of Radiology held in October at Caracas, Venezuela. Dr. Bloedorn was assisted by Dr. Eugene J. Linberg in the discussions. Dr. Carlo A. Cuccia also participated in the discussions giving a paper on treatment of neoplasms of the urinary bladder.

DR. FRANCIS J. BORGES has been promoted to the rank of associate professor of medicine.

India Orders 5000 Copies of Krantz-Carr Text

INDIA, the world's largest democracy, has ordered some 5000 copies of the sixth edition of *Pharmacologic Principles of Medical Practice* by Dr. John C. Krantz, Jr., and Dr. C. J. Carr.

The volume, locally prominent for more than two decades, has been recently translated into Portuguese and Spanish.

In response to specific questions, Dr. Krantz has informed us that India is rapidly increasing educational resources. Commensurate with this, there is a large and growing demand for American scientific books; however, the purchasing power of most Indian students is very low and the relative high cost of American publications has prevented the demands for American texts from being fully met. In an effort to provide a partial remedy for the situation, a joint program is under way involving the governments of the United States and India, as well as co-operating American and Indian publishers. Under this special international program of dissemination of medical knowledge, this textbook was purchased.

University Hospital Alumni Enter Varied Careers

AMONG the resident physicians completing training at the University Hospital was Dr. Mary C. Burchell of the Class of 1957 who plans to enter private practice of general surgery.

DR. JAMES P. DURKAN of the Class of 1959 has been appointed instructor in gynecology and obstetrics in the School of Medicine.

DR. HOWARD RUBENSTEIN of the Class of 1959 has entered the National Naval Medical Center as a trainee in cardiology.

DR. BERNICE SIGMAN has accepted a fellowship in Genetics at the University of Washington School of Medicine.

Department of Dermatology Continues Active

IN JUNE 1964, Dr. Francis A. Ellis and Dr. Harry M. Robinson, Jr., attended a meeting of the American Medical Association in San Francisco. Dr. Robinson presented a paper on Tolnaftate, experimental and clinical studies. At the meeting of the American Dermatological Association in Maui, Hawaii, Dr. Robinson, Jr., also read the first paper, "Rehabilitation, the Dermatologist's Problem." This is the first paper of this type ever to be presented in the United States. The article has been accepted for publication in the *Archives of Dermatology* and will be preceded by an editorial on this subject written by Dr. Robinson.

In September, 1964, Dr. Robinson appeared for the Medical and Chirurgical Faculty on television to discuss Public Health Aspects of Syphilis. On October 25th he attended a meeting of the American Society of Microbiology in New York City where he presented an exhibit on Tolnaftate and read a paper by invitation on the same subject.

Drs. Francis Ellis and Raymond C. V. Robinson will attend the meeting of the Association of Professors of Dermatology to be held in conjunction with the meeting of the American Academy of Dermatology in Chicago and will participate in the post-graduate program on Pathology and Clinical Pathologic Conferences.

At a recent meeting of the American Academy of Dermatology, Dr. Robinson presented a short paper on "Cutaneous Lymphoma" and a paper entitled "A Patient Who Subsequently Died from Radiation Therapy."

In January, 1965, Dr. Joseph Burnett will join the Division of Dermatology on a geographical full time basis.



Milton S. Sacks

1909-1964

AFTER a long illness, Milton Sacks, one of the Medical School's pioneer full-time faculty members, died on October 3, 1964. In spite of ill health extending over many months, Milton continued to work in a way that his illness was known only to a few. A few weeks before death he reluctantly followed medical advice and stopped his intensive schedule. Fully intent on discharging his many obligations, he kept abreast of hospital and departmental affairs while a bed patient. Never did Milton complain of personal disability, but, in characteristic manner, he persisted in completing the day's work.

Milton will be missed in many ways. He was one of the first clinical faculty members to establish his office in the University Hospital. Always an outstanding student, he graduated from the University of Maryland in 1932 and received his

medical degree in 1934. Following house officership at the Mercy Hospital he was appointed to the medical faculty as instructor in 1935. He held the Hitchcock Fellowship in Medicine for two years beginning in 1936 and subsequently was promoted to assistant professor of medicine and head of the division of clinical pathology of the Medical School. Full professorial rank was given him in 1954. For approximately three decades Milton served as director of the clinical laboratories of the Hospital. This important post, one of the vital areas of a diagnostic hospital, expanded rapidly in personnel and in its capacity to perform specialized procedures. Under his careful direction the blood bank developed and the hematologic section which he expanded in stride with current demands became noted for its excellence. Throughout this important developmental period, and with little room for expansion, he directed the laboratory in its vital mission.

Teaching of medical students was one of his special talents. Responsibility for presenting laboratory methods to beginners in medicine was his. A devoted group of instructors willingly joined him in presenting this valuable course. Never one to compromise his high standards, he expected students to perform adequately, and they responded to his stimulating and inspiring lectures. The hematologic teaching and research program matured under him. Many post-graduate students of hematology grew under his careful tutoring and filled faculty positions in other teaching institutions.

Faculty and students regarded Milton as unusually broadly oriented in basic science and clinical medicine and as a teacher of teachers. Unique was his ability to review, so concisely, a broad subject of hematology or general medicine. Personal contributions to medical literature embraced the fields of leukemia,

Hodgkin's disease, bleeding disorders, Rh isosensitization, and the anemias. Milton was one of the early contributors to our knowledge of the significance of Rh factors in disease. The Baltimore Rh Typing Laboratory was organized by him in 1945 and he served as its director until his death. During the last decade Milton pursued his interests in genetics and made significant contributions to this important field through careful studies of inherited familial hematologic disorders. He had the facility of writing with a clear perceptive style and his editorials on various subjects prepared for the *Annals of Internal Medicine* at the request of Dr. Maurice C. Pincoffs were authoritative and comprehensive. Analytical by nature, Milton could search out the basic professional and administrative answers to complicated problems. He always demanded a high level of performance and, to many friends and students, served as an example. Mediocrity he abhorred.

Teaching physicians throughout Maryland provided him much satisfaction even though long hours of travelling about the state were tiring. Milton received many invitations to speak to medical societies

and to other professional groups. He served as a consultant in hematology to several hospitals. Participation in civic activities was extended unstintingly and intimate friends knew so well of his cultural interests. Music and classic literature gave him special pleasure. He served with pride on the Board of Directors of Park School. In spite of many duties he was never too hurried to take time for greeting an associate or to advise house officers and students.

The death of Milton Sacks has removed from our ranks a very senior faculty member and a leading contributor to the professional and lay community of Baltimore. Maryland may look upon him with pride as one of her outstanding hematologists. The faculty extends its deepest sympathy to his wife, Mrs. Nell Greenfield Sacks, and to their children, Mrs. Elizabeth Sussman, Margaret, Paul, and Charles Sacks. They may derive some comfort from the realization that the School of Medicine and University Hospital are mindful of the debt which they owe him. His many friends share in this loss. THEODORE E. WOODWARD, M.D.

Professor of Medicine

ABSTRACTS

of articles by faculty and alumni

Psychoanalytic Theory of Placebo—Forrer, Gordon R. (Class of 1947).

Dis. Ner. Syst. 25:655, 1964

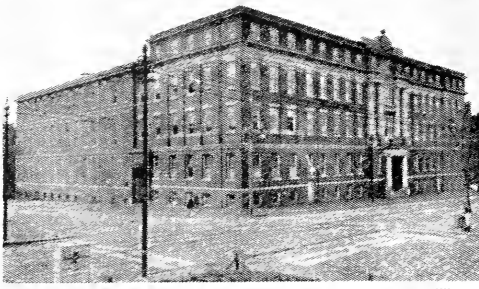
The concept of hallucinatory phenomena being confined to the 5 senses of hearing, seeing, smelling, tasting, and feeling has been expanded to include causeless perceptions, irrespective of the sensory modality through which they are perceived. Functional complaints for which no demonstrable organic cause can be found are in actuality hallucinatory responses. The placebo acts by symbolically supplying for the adult that which during infancy was supplied by the mother. The placebo itself is a symbolic representation of the milk which, during infancy, filled the void created during the ebb and the flow of the "hunger tide."

Hypogonadal State in the Prepuberal Female (Report of Three Cases of FSH Specific Pituitary Insufficiency)—Bobby A. Rimer,

M.D., and Arthur L. Haskins, M.D.

Pacific Med. Surg. 72:284, 1964

Three patients observed over a period of 5 years at the University of Maryland Outpatient Clinics were shown to have the hypogonadal state secondary to specific FSH deficiency. In 1 patient the clinical and laboratory impression was further verified by gonadal response to exogenous FSH administration. The final therapy in each instance was the administration of estrogen. No attempt was made to provide menstrual function.



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SCENES RECALLED
From the BULLETIN
of yesteryears



MARYLAND GENERAL HOSPITAL

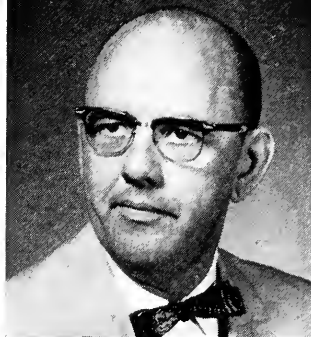


COLLEGE OF PHYSICIANS AND SURGEONS AND MERCY HOSPITAL

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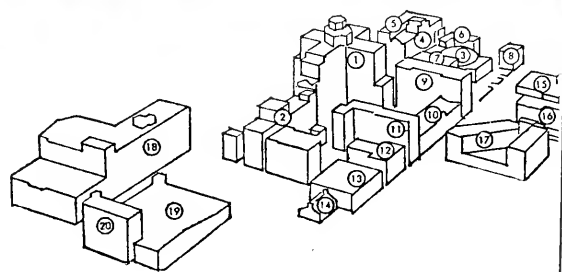
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Fellow Medical Alumni:

What a heritage there is present in our alumni association. As you get more involved in this business you begin to realize more fully the "abundance of the past." The number of "men of science" that our school has given to the world—the heights that some have attained—the difficulties that some have fought and overcome—the contributions beyond the realm of medicine that some have made. There are now listed on our roles almost 400 living alumni who graduated more than 50 years ago. Many of these men were and are "family doctors"—those individuals who so brightened and enriched the term "Doctor" in the minds and mouths of so many people. If the "halo" has become tarnished I believe the fault can be laid at the feet of the more recent practitioners of the art. Somewhere along the line, as we too have become a part of the "treadmill to oblivion," we have become a part of or have contributed to a change in the doctor-patient relationships and the "doctor image." Could it be that as we have had more time for practice we have had less time for patients? Have we sharpened our techniques as we dulled our manners? There is a service club that has as its motto—"Service above Self"—this was long a cardinal principle of our profession. Has this ideal slipped a little? Maybe this is all a part of the "evolution of our age" and you are not concerned about it as I seem to be. However, I would not seek idolatry for our profession but respect. So often in recent months I have heard, "It's no fun to practice medicine anymore." I would plead the case that respect and enjoyment are bed-fellows and as we restore one we will regain the other. Faith becomes such an integral part of this—faith in the future—faith in ourselves and our patients' faith in us. As we become a part of the next 400 of 50 years-plus alumni we should have sustained and even enriched the heritage that passes to our sons and daughters—the practitioners of the future.

J. HOWARD FRANZ, M.D.

President





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Reunion Classes Announced

The office of the executive secretary of the Medical Alumni Association in co-operation with the board of directors, has announced the reunion classes for the

years 1920-1960. The following classes are names including the class captain whose name precedes the class roll.

45th Year Reunion Class of 1920

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ERNESTO QUINTERO
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122 S. Center St., Cumberland, Md. 21502
J. HAROLD UNDERWOOD
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4000 W. Northern Pkwy., Baltimore, Md.
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666 Elm St., Buffalo, N. Y. 14203

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JAMES A. MILLER
1331 Reisterstown Rd., Baltimore, Md. 21208

VICTOR J. MONTILLA HERNANDEZ
606 Professional Bldg., Santurce, P. R. 00902

CHARLES Y. MOSER
Kingwood, W. Va.

NATHAN E. NEEDLE
4215 Park Heights Ave., Baltimore, Md. 21215

ROBERT D. OLIVER
Selma, N. C.

DUNCAN OWEN
1920 Ft. Bragg Rd., Fayetteville, N. C.

ZACK OWENS
Box 442, Elizabeth City, N. C.

ROBERT PERLMAN
2939 Vernon Pl.
Cincinnati, Ohio 45219

IRVING E. RINEBERG
137 Livingston Ave., New Brunswick, N. J.
08902

NICHOLAS M. ROMANO
104 S. 2nd St., Bangor, Pa.

ABNER H. ROSENTHAL
104-25 Lefferts Blvd., Jamaica, N. Y. 11419

GEORGE J. SAWYER, JR.
4808 Harford Rd., Baltimore, Md. 21214

LOUIS R. SCHOOLMAN
810 Toll House Ave., Frederick, Md.

JOSEPH J. SMITH
800 Stratfield Rd., Bridgeport, Conn. 06604

NATHAN SNYDER
3407 Seven Mile Lane, Baltimore, Md. 21208

JACK G. SOLTROFF
3133 Kensington Ave., Philadelphia, Pa.

NATHANIEL M. SPERLING
503 Main St., Greenport, N. Y.

WILTON M. WARMAN
Mile Ground Med. Ctr., Morgantown, W. Va.

A. SETH WERNER
205 Ocean Ave., Brooklyn, N. Y. 11225

RALPH F. YOUNG
101 E. Potomac Ave., Williamsport, Md.
21795

SAMUEL ZEIGER
811 Malton Ave., Apt. #14, Bronx, N. Y.
10451

MILTON ADELMAN
29 Shawnee Rd., Scarsdale, N. Y. 10583

JOHN WARREN ALBRITAIN
U. S. Naval Hospital, Portsmouth, Va.

EDWARD J. ALESSI
3009 Northway Dr., Baltimore, Md. 21234

MIGUEL ALONSO
Box 8216, Fernandez Juncos Sta., Santurce,
P. R. 00910

GEORGE ALPERT
217 Harvard St., Boston, Mass. 02122

JOHN BASCOM ANDERSON
12 West Wing, Doctors Bldg., Asheville,
N. C. 28801

MELVIN R. AUNGST
Fort Kent, Maine 04743

HENRY EUGENE BARNES, JR.
Box 687, Hickory, N. C. 28601

DAN GEORGE BIERER
11 Gransburg St., Delmont, Pa. 15626

GEORGE H. BROUILLET
Medical Arts Bldg., Baltimore, Md. 21201

ERNEST I. CORNBROOKS
521 Medical Arts Bldg., Baltimore, Md. 21201

EDWARD F. COTTER
827 Linden Ave., Baltimore, Md. 21201

FRANK H. CUTLER, JR.
508 E. South Temple St., Salt Lake City, Utah
84102

FRANCIS GEO. DICKEY
Vet. Adm. Hosp., Dwight, Ill. 60420

EARL H. DIEHL
310 W. Reynolds St., Plant City, Fla.

DOUGLAS DODGE
2900 Delmar Blvd., Pasadena, Calif. 91110

A. A. DOERNER
744 Ulmar, Pacific Palisades, Calif.

WM. C. DUNNIGAN
4916 Harford Rd., Baltimore, Md. 21214

SAMUEL E. EINHORN
116 Millburn Ave., Millburn, N. J. 07041

FERDINAND FADER
365 Park Ave., East Orange, N. J. 07017

IRVING FREEMAN
5734 Greenspring Ave., Baltimore, Md. 21209

ROBT. PEARSON FRUCHTBAUM
431 Franklin Ave., Nutley, N. J. 07110

BULLETIN OF THE SCHOOL OF MEDICINE, UNIVERSITY OF MARYLAND

- PHILIP J. GALITZ
17480 S. Federal Hgwy., Perrine, Fla. 33157
- WALTER H. GERWIG, JR.
V. A. Hospital, Clarksburg, W. Va. 26301
- JOHN RANDOLPH GODBEY
1218 Virginia St. E., Charleston, W. Va.
25301
- WM. H. GRENZER
1520 E. 33rd St., Baltimore, Md. 21218
- JOSEPH B. GROSS
6911 Park Heights Ave., Baltimore, Md. 21215
- GERARD P. HAMMILL
John J. Kane Hospital, Vanadium Rd.,
Pittsburgh, Pa. 15216
- JOHN CARL HAMRICK
809 N. Lafayette St., Shelby, N. C.
- IRA F. HARTMAN
11 Main St., Buchhannon, W. Va.
- JEANNETTE ROSALINE HEGHINIAN
2212 South Rd., Baltimore, Md. 21209
- WM. GOLDSBOROUGH HELFRICH
5006 Roland Ave., Baltimore, Md. 21210
- JAMES K. HERALD
1005 Belmont Ave., Youngstown, Ohio 44504
- LEWIS CHARLES HERROLD
36 N. Main St., Cover, Pa. 17315
- ARTHUR HOLLANDER
1695 Grand Concourse, Bronx, N. Y. 10468
- JOSIAH ARNOLD HUNT
Main St., Delta, Pa. 17314
- WILLIAM P. JORDAN
Windsor, N. C.
- AARON L. KAMINSKY
Jackson Mem. Hosp., Miami, Fla. 33136
- HARRY F. KANE
9302 Harford Rd., Baltimore, Md. 21234
- MICHAEL L. KELLER
673 E. 27th St., Paterson, N. J. 07504
- IRVING KLOMPUS
301 E. High St., Bound Brook, N. J. 08805
- EDWIN C. LANE
5664 Livingston Rd., Oxen Hill, Washington,
D. C. 20021
- CALEB R. LAYTON
Centreville, Md. 21617
- ARCHIE CLIFTON LEWIS
Main St., Princess Anne, Md. 21853
- WALTER LICHTENBERG
309 Kinderhamack Rd., Westwood, N. J. 07675
- SAUL LIEB
804 Clinton Ave., Newark, N. J. 07108
- LOUIS GRANDIN LLEWELYN
703 W. Barr St., Lancaster, S. C. 29720
- DONALD CLAY MACLAUGHLIN
303 N. Rolling Rd., Baltimore, Md. 21228
- CHARLES B. MAREK
1218 St. Andrews Way, Baltimore, Md. 21212
- HOWARD B. MAYS
3301 N. Charles St., Baltimore, Md. 21218
- OSCAR TRACY McDONOUGH, JR.
Naval Hospital, Quantico, Va. 22133
- ALPINE WATSON MCGREGOR
230 E. Tabernacle, St. George, Utah 84770
- D. J. McHENRY
940 S. Queen St., York, Pa. 17403
- KARL FREDERICK MECH
5507 Roland Ave., Baltimore, Md. 21210
- LAWRENCE H. MILLS
Clarksburg, W. Va. 26301
- BRUCE MONTGOMERY
Fairchance, Pa.
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New Stanton, Pa. 15672
- PHILIP OWEN
1345 Morris Ave., Union, N. J. 07083
- ANTHONY JAMES PEPE
299 Seymour Ave., Derby, Conn.
- WILLIAM RAFFEL
2300 W. Rogers Ave., Baltimore, Md. 21209
- CHARLES H. REIER
318 Northwind Rd., Baltimore, Md. 21204
- DAVID P. ROBERTS
11 E. Chase St., Baltimore, Md. 21202
- HARRY M. ROBINSON, JR.
1209 St. Paul St., Baltimore, Md. 21202
- MILTON I. ROBINSON
1807 Ave. I, Brooklyn, N. Y. 11230
- FRANK T. ROGERS
East Tenn. Baptist Hosp., Blount Ave., S.E.,
Knoxville, Tenn. 37920
- ISRAEL ROSEN
2413 E. Monument St., Baltimore, Md. 21205
- SOL ROSEN
214 N. 2nd St., Millville, N. J. 08332
- HAROLD WM. ROSENBERG
46 Hampton Rd., Scarsdale, N. Y. 10583
- JOHN C. RUSSELL
637 Sahara Ave., Las Vegas, Nev. 89108
- JOSEPH SCHAPIRO
365 Broadway, Amityville, L. I., N. Y. 11701
- MILTON SCHLACHMAN
110-50 71st Rd., Forest Hills, L. I., N. Y.
11375

ALUMNI ASSOCIATION SECTION

- GEORGE F. SCHMITT, JR.
30 S.E. 8th St., Miami, Fla. 33136
- PAUL SCHONFELD
2301 Annapolis Rd., Baltimore, Md. 21230
- SIDNEY SHAPIRO
334 Union Ave., Irvington, N. J. 07111
- JOHN M. SHAUL
685 3rd Ave., New York, N. Y. 10017
- LEO BROWN SKEEN
804 N. Main St., Mooresville, N. C.
- VERNON E. SPITZNAGLE
1008 Tunbridge Rd., Baltimore, Md. 21212
- BENJ. MAXWELL STEIN
366 Broadway, Amityville, N. Y. 11701
- LOUIS TEITEL
Professional Bldg., 280 Mamaroneck Ave.,
White Plains, N. Y. 10605
- HARRY A. TEITELBAUM
5605 Greenspring Ave., Baltimore, Md. 21209
- JOSEPH TUBY
1310 Beverly Rd., Brooklyn, N. Y. 11226
- JULIUS M. WAGHELSTEIN
1010 St. Paul St., Baltimore, Md. 21202
- JOHN MCC. WARREN
305 Prince George, Laurel, Md. 20810
- JAMES BLOCK WHELESS
Louisburg, N. C.
- CHARLES VERNON WILLIAMSON
5550 Baltimore Natl. Pike, Baltimore, Md.
21228
- NORMAN J. WILSON
135 Francis St., Boston, Mass. 02115
- ALVIN EUGENE WILLIAM WODE
Falls Church, Va.*
- EVERET H. WOOD
4800 Gibson Blvd., S.E., Albuquerque,
N. Mex. 87108
- LEWIS KLAIR WOODWARD
Woodstock, Va.
- WALTER L. BAILEY
1303 Delaware Ave., Wilmington, Del. 19806
- DANIEL C. BARKER
133 Reef Rd., Fairfield, Conn. 06430
- EDMUND BEACHAM
710 Thornwood Ct., Baltimore, Md. 21204
- HAROLD BIEHL
1212 St. Paul St., Baltimore, Md. 21202
- JESSE N. BORDEN
819 Park Ave., Baltimore, Md. 21201
- CARLTON BRINSFIELD
401 Decatur St., Cumberland, Md. 21502
- LESTER CAPLAN
1401 Reisterstown Rd., Baltimore, Md. 21208
- WELDON PORTER CHANDLER
104 Main St., Weaverville, N. C. 28787
- JOHN T. COLE
Cedar Swamp Rd., Jerico, L. I., N. Y. 11753
- PAUL H. CORRELL
26286 Cook Rd., Olmsted Falls, Ohio
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1001 College St., Oxford, N. C. 27565
- EDWIN O. DAUE
2800 Green St., Harrisburg, Pa. 17110
- JOSEPH DELUCA
110 Lockwood, Providence, R. I. 02903
- CHARLES F. DENT
244 Pleasant St., Morgantown, W. Va. 26505
- WM. CARROLL DUFFY
1120 St. Paul St., Baltimore, Md. 21202
- JAMES H. DWYER
245 N. Potomac St., Hagerstown, Md. 21740
- JAMES ALBERT FREEMAN, JR.
317 S. Main St., Dawson Sp., Ky. 42408
- WM. HAMMOND FUSTING
4328 N. Charles St., Baltimore, Md. 21218
- WM. FARROW GASSAWAY
Main St., Ellicott City, Md. 21042
- LOUIS R. GIBBS
V.A. Hospital, Mountain Home,
Johnson City, Tenn.*
- IRVING V. GLICK
15 Canterbury Rd., Great Neck, N. Y. 11021
- WALTER R. GRAHAM
1012 Kings Dr., Charlotte, N. C. 28207
- LUIS ROBERTO GUZMAN-LOPEZ
Presbyterian Hosp., Box 32, San Juan, P. R.
00902
- MORTON HECHT, JR.
225 Middle Neck Rd., Gr. Neck, N. Y. 11021
- EMIL HELLER HENNING
Baltimore, Md.

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Class of 1940

Captain: F. Ford Loker, M.D.

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233 E. Main St., Elkton, Md. 21921
- WM. CHARLES ARNEY
402 S. Sterling St., Morganton, N. C. 28655
- JOHN C. BAIER
815 Eastern Ave., Baltimore, Md. 21221

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- ALBERT HEYMAN
Duke Hospital, Durham, N. C. 27706
- DANIEL HOPE, JR.
51 Rolling Rd., Catonsville, Md. 21228
- BENJAMIN H. INLOES, JR.
3116 Victoria Blvd., Hampton, Va. 23361
- LOUIS C. JORGENSEN
1596 Washington Blvd., Ogden, Utah 84404
- JAMES R. KARNs
800 Cathedral St., Baltimore, Md. 21201
- JULIAN G. KIRCHICK
230 Hilton Ave., Hempstead, N. Y. 11550
- SCHUYLER GEO. KOHL
31 Whig Rd., Scarsdale, N. Y. 10583
- EDWARD L. J. KRIEG
510 N. Chapelgate La., Baltimore, Md. 21228
- ALBERT A. KURLAND
6207 Winner Ave., Baltimore, Md. 21215
- ROBERT E. LARTZ
165 Euclid Ave., Sharon, Pa. 16147
- WM. S. M. LING
34 E. 72nd St., New York, N. Y. 10021
- WM. C. LIVINGOOD
Guthrie Clinic, Sayre, Pa. 18840
- FRANK FORD LOKER
1120 St. Paul St., Baltimore, Md. 21202
- H. PEARCE MACCUBBIN
110 Lee St., Winchester, Va. 22601
- CLARENCE W. MARTIN
Wright's Mill Rd., Baltimore, Md. 21207
- ALFRED R. MARYANOV
136 Race St., Cambridge, Md. 21613
- HAROLD McCANN
3355 16th St. N.W., Washington, D. C. 20010
- JAMES E. McCLUNG
25 Oakford Ave., Richwood, W. Va. 26685
- WM. D. McCLUNG
P. O. Box 548, Summersville, W. Va. 26651
- WM. J. McKINNON
407 S. Greene St., Wadesboro, N. C. 28170
- ELIZABETH H. McNEAL
835 Paxinosa Ave., Easton, Pa. 18042
- FOREST CHAUNCEY MEADE
501 E. Center, Lexington, N. C. 27292
- JOSEPH MICELI
902 Stone Barn Rd., Baltimore, Md. 21204
- EDWARD L. MOLZ
7425 Harford Rd., Baltimore, Md. 21234
- FREDERICK E. MURPHY, JR.
602 Sieras St., Thomasville, Ga. 31792
- WILLIAM T. MUSE
5607 Purlington Way, Baltimore, Md. 21212
- G. ROGERS MYERS
205 Prescott St., El Cajon, Calif. 92020
- GUILLERMO PICO-SANTIAGO
1475 Wilson Ave., San Juan, P. R. 00907
- ROSS Z. PIERPONT
5408 Purlington Way, Baltimore, Md. 21212
- ROBERT T. PIGFORD
155 Colonial Dr.
Wilmington, N. C. 28403
- WILLIAM R. PLATT
Mo. Baptist Hosp., 919 Taylor Ave.
St. Louis, Mo. 63108
- ARTHUR EDGAR POLLOCK
1217 14th Ave., Altoona, Pa. 16601
- LEONARD POSNER
20 Plaza St., Brooklyn, N. Y. 11238
- JOHN COSTELLO POUND
3325 Frederick Ave., Baltimore, Md. 21229
- C. MARTIN RHODE
V. A. Hospital, Forest Hills, Augusta, Ga. 30904
- CONRAD L. RICHTER
226 St. Dunstons Rd., Baltimore, Md. 21212
- RAYMOND C. VAIL ROBINSON
1004 N. Calvert St., Baltimore, Md. 21202
- DONALD J. ROOP
1112 Hampton Garth, Baltimore, Md. 21204
- CARL E. ROTHSCHILD
1 Browne's Terr., Englewood, N. J. 07631
- THOS. EDGIE RUSSELL
3901 N. Charles St., Baltimore, Md. 21218
- PHILIP JOSEPH RUSSILLO
274 Barrow St., Jersey City, N. J. 07302
- GEORGE G. SCHLESINGER
Box 151, Mardela Springs, Md. 21837
- JOSEPH WRIGHT SLOAN
250 Kinderkamack Rd., Westwood, N. J. 07675
- JAMES BRADY SMITH
Ft. Smallwood, Pasadena, Md. 21123
- RUBY A. SMITH
16 W. Read St., Baltimore, Md. 21201
- ORLANDO J. SQUILLANTE
209 Hope St., Bristol, R. I. 02809
- WILLIAM J. SUPIK
8 East Eager St., Baltimore, Md. 21202
- LOUIS H. TANKIN
1701 Eutaw Pl., Baltimore, Md. 21217
- ALEXANDER F. THOMPSON
Rt. 3, Box 452B, Concord, N. C. 28025

ALUMNI ASSOCIATION SECTION

SAMUEL TOMPAKOV
3600 Park Heights Ave., Baltimore, Md. 21215

WILFORD H. TOWNSHEND, JR.
14 E. Eager St., Baltimore, Md. 21202

WILLIAM TREVOR
570 Park Ave., New York, N. Y. 10021

WM. CARRYL TRIPLETT
1800 Staples Bldg., Corpus Christi, Texas
78404

MERTON T. WAITE
121 Cathedral St., Annapolis, Md. 21401

WILLIAM E. WEEKS
5839 York Rd., Baltimore, Md. 21212

JESSE L. WILKINS
98 Cathedral St., Annapolis, Md. 21401

HERMAN WILLIAMS
413 N. 5th St., Reading, Pa. 19601

RICHARD T. WILLIAMS
38 Park St., Warsaw, N. Y. 14569

HARRY T. WILSON
1100 Hampton Garth, Baltimore, Md. 21204

WM. I. WOLFF
16 Ridge Rd., Tenafly, N. J. 07670

JAMES R. WRIGHT
3319 White Oak Rd., Raleigh, N. C. 27609

SOLOMON BERNARD ZINKIN
424 2nd St., Lakewood, N. J. 08701

**20th Year Reunion
Class of 1945**

Captain: Vincent DeP. Fitzpatrick, M.D.

BENJAMIN AMSTERDAM
16550 Ventura Blvd., Encino, Calif.

GEORGE H. ANDERSON
6001 Bahama Shores Dr., S., St. Petersburg,
Fla. 33705

GAYLE GARDNER ARNOLD
Box 7303, Richmond, Va. 23231

FRANK J. AYD, JR.
912 Lake Ave., Baltimore, Md. 21212

JOSEPH W. BAGGETT
911 Hay St., Fayetteville, N. C.

CLAUDE FLETCHER BAILEY
1502 Carolina Ave., Elizabeth City, N. C.
27909

THOMAS GORDON BARNES II
344 Arnold Ave., Greenville, Miss. 38701

DAVID H. BARKER
35 Kirby Ct.
Grosse Pointe Farms, Mich. 48236

PHILIP C. BAROODY
93 Middle St., Manchester, N. H. 03101

DAVID F. BELL, JR.
2708 Mt. View Ave., Bluefield, W. Va. 24701

BENJ. BERDANN
7809 Liberty Rd., Baltimore, Md. 21207

JOSEPH H. BRANNEN
Doctors Bldg., Pendleton Dr., Valdosta, Ga.
31601

WM. K. BRENDLE
608 S. Union Ave., Havre de Grace, Md. 21078

CHARLES L. BUTLER
Huntsville Hosp., Huntsville, Ala. 35801

ROBERT F. BYRNE
5711 Perryton St., Wichita, Kans. 67220

GEO. H. CALLENDER, JR.
1308 Quarrier St., Charleston, W. Va. 25301

LEAH R. CAMP
Grasty Rd., north of Old Ct. Rd., Baltimore,
Md. 21208

OSCAR B. CAMP
Grasty Rd., north of Old Ct. Rd., Baltimore,
Md. 21208

NATHAN CANTER
3618 Forest Park Ave., Baltimore, Md. 21216

MARY DORCAS CLARK
Chestnut Ridge Rd., Rt. 4, Box 19,
Morgantown, W. Va. 26501

EUGENE H. CONNER
5704 Apache Rd., Louisville, Ky. 40207

SARAH COOK
3103 10th St., N., Arlington, Va. 22301

JOHN B. DAVIS
2 Broadway, Frostburg, Md. 21532

RALPH FLETCHER
510 Main St., Quincy, Ill. 62301

EDUARDO DEALBA, JR.
Balboa Hgts., Canal Zone*

JOHN M. DENNIS
803 Huntsman Rd., Baltimore, Md. 21204

JOHN PELL DOENGES
600 E. Main St., Olney, Ill. 62450

VINCENT DEP. FITZPATRICK
1120 St. Paul St., Baltimore, Md. 21212

WM. L. FOSTER
2701 Melrose Ave. N.W., Roanoke, Va. 24017

WM. HENRY FRANK
16 Akers St., Johnstown, Pa. 15905

JOSEPH B. GANEY
Manatee Ave. and 2nd St. W., Bradenton,
Fla. 33505

- AUSTIN E. GIVENS
14732 Aloha Ave., Saratoga, Calif. 95070
- HELEN A. GREENLEAF
95 Monmouth St., Red Bank, N. J. 07701
- ARTHUR T. HALL, JR.
507 Drury La., Baltimore, Md. 21229
- DANIEL OSCAR HAMMOND
350 N.E. 15th, Miami, Fla. 33132
- HOWARD H. HAYNES, JR.
508 E. South Temple St., Salt Lake City,
Utah 84102
- JOHN A. HEDRICK
309 3rd Ave., Beckley, W. Va. 25801
- JOHN F. HENNESSY
130 Foster Ter., Ridgewood, N. J. 07450
- STANLEY EDWARD HERRICK, JR.
12 Deering St., Portland, Me. 04101
- ALBERT C. HERRMANN
5525 Belair Rd., Baltimore, Md. 21205
- WM. A. HOLBROOK, JR.
4500 College Ave., College Park, Md. 20740
- HECTOR A. HOYOS-NAPOLEONI
41 Estrella St., Ponce, P. R. 00907
- HARRY HUTCHINS
Doctors' Bldg., Buford, Ga. 30518
- STEPHEN R. KEISTER
212 W. 6th St., Erie, Pa. 16507
- ALEXANDER P. KELLY, JR.
Henry Ford Hosp., Detroit, Mich. 48202
- RICHARD A. KENWORTHY, III
207 Old Boston Rd., Wilton, Conn. 06897
- LEONARD KURLAND
NINDB, National Institutes of Health,
Bethesda, Md. 20014
- DANIEL BAIR LEMEN
Naval Supply Ctr., Norfolk, Va. 23511
- CHAS. MILTON LINTHICUM
Linthicum Heights, Md. 21090
- HENRY F. MAGUIRE
6330 Alvarado Rd., San Diego, Calif. 92120
- JAMES R. MCNINCH, JR.
113 S. State St., Dover, Del. 19901
- CLARENCE S. MILLER
801 Portola Dr., San Francisco, Calif. 94127
- PAUL R. MYERS
Elk County Genl. Hosp., Ridgway, Pa.
- ALFRED S. NORTON
4711 Highland Ave., Bethesda, Md. 20014
- ALLEN J. O'NEILL
8601 Old Georgetown Rd., Bethesda, Md.
20014
- ROY H. OTT, JR.
640 Front Range Rd., Littleton, Colo. 80120
- S. MALONE PARHAM
Henderson, N. C. 27536*
- R. DEWITT PECK
605 3rd Ave., Montgomery, W. Va. 25136
- MALCOLM DUDLEY PHILLIPS
Darlington, Md. 21034
- WARREN HORTON PIKE, JR.
108 E. 3rd St., Hobart, Ind. 46342
- JOSEPH EDWARD REAHL
VA Regional Office, Baltimore, Md. 21202
- WM. HENRY ROBINSON
122 Railroad St., St. Johnsbury, Vt. 05819
- WM. A. RODGERS
815 Eastern Ave., Baltimore, Md. 21221*
- JOHN L. ROSENTHAL
135 W. Belvedere Rd., Norfolk, Va. 23505
- ALVIN D. RUDD
2500 Eutaw Pl., Baltimore, Md. 21217
- MARVIN RUDD
Centerville Cl., RD 1, Fredericktown, Pa.
17323
- HELARION SANCHEZ, JR.
Sanatorio A. Ruis Soler, Rio Piedras, P. R.
00928
- JAMES H. SHELL, JR.
1127 Gypsy La. W., Baltimore, Md. 21204
- EDWARD SOKOLSKI
1 Padanaram Rd., Danbury, Conn.
- ANTHONY F. A. STEDEM, JR.
1824 Circle Rd., Baltimore, Md. 21204
- STANLEY R. STEINBACH
11 Slade Ave., Baltimore, Md. 21203
- CHAS. W. STEWART, JR.
645 W. Redwood St., Baltimore, Md. 21201
- CHARLES STRAHAN, JR.
105 Dexter Rd., Wilmington, Del. 19803
- RUSSELL B. STREET, JR.
114 Whitwell St., Quincy, Mass. 02169
- WINSTON LEE SUMMERLIN
420 S.W. 8th St., Gainesville, Fla. 32601
- JOHN J. TANSEY
3350 Wilkens Ave., Baltimore, Md. 21229
- PAUL B. TOMS
21 Starling Ave., Martinsville, Va. 24112
- ALLEN E. TREVASKIS
941 Hamilton St., Allentown, Pa. 18103
- VICTOR WAGNER
9 Kensington Ave., Jersey City, N. J. 07304

ALUMNI ASSOCIATION SECTION

HAROLD H. WEINBERG
1724 Eutaw Pl., Baltimore, Md. 21217
JOSEPH WEINTRAUB
Baltimore, Md.*
THOMAS E. WHEELER
3601 Clifmar Rd., Randallstown, Md. 21107
JOSEPH M. WHITE, 3RD
Blackberry Lane, Morristown, N. J. 07960
MARY L. TOUCHET WHITE
Blackberry Lane, Morristown, N. J. 07960
OLIVER P. WINSLOW, JR.
7901 Altamira St., Coral Gables, Fla. 33146
ARTHUR F. WOODWARD
115 N. Van Buren St., Rockville, Md. 20850

15th Year Reunion

Class of 1950

Captain: Francis J. Borges, M.D.

WILLIAM A. ANDERSON
220 Melanchton Ave., Timonium, Md. 21093
JOHN L. BACON
326 W. Jefferson St., Rockford, Ill.
CHARLES BAGLEY, III
707 Camden Ave., Salisbury, Md. 21801
MARY V. MEDAIRDY BARSTOW
Bradshaw, Md. 21021
WILBUR N. BAUMANN
3 Church St., Cambridge, Md. 21613
JAY LEWIS BISGUYER
6816 Tuliphill Ter., Washington, D. C. 20016
HARRY H. BLEECKER, JR.
8538 Huntington Dr., San Gabriel, Calif. 91775
MARY ELIZ. STORM BLEEKER
8538 Huntington Dr., San Gabriel, Calif. 91775
FRANCIS J. BORGES
1321 Heatherhill Rd., Glendale,
Baltimore, Md. 21212
RAYMOND BRADSHAW, JR.
345 University Blvd., Silver Spring, Md. 20901
JOSEPH B. BRONUSHAS
3037 O'Donnell St., Baltimore, Md. 21224
FRED J. BURKEY
20 Cedar Blvd., Pittsburgh, Pa. 15228
L. GUY CHELTON
Strickler Medical Bldg., 1993 Peachtree N.E.,
Atlanta, Ga. 30309
JEROME J. COLLIER
2217 South Rd., Baltimore, Md. 21209

THOS. N. CORPENING
2078 Wesleyan St., Houston, Tex. 77027
JOSEPH R. COWEN
16 E. Biddle St., Baltimore, Md. 21202
WM. A. CRACRAFT
1221 Virginia St. E., Charleston, W. Va. 25301
HAROLD L. DALY, JR.
500 S. Ionia, Albion, Mich. 49224
MIRIAM S. DALY
500 S. Ionia, Albion, Mich. 49224
LEONARD L. DEITZ
1106 Spring St., Silver Spring, Md. 20910
ELINOR WEED DEMAREST
Mohawk St., Rye, N. Y. 10580
LAWRENCE M. DEMAREST
175 Purchase St., Rye, N. Y. 10580
NICHOLAS DEMMY
10515 Carnegie Medical Bldg., Cleveland, Ohio
44106
F. T. EDMUNDS
Kanawha City Med. Bldg., 1014 Va. St. E.,
Charleston, W. Va. 25301
JOHN A. GOOGINS
Indianapolis, Ind.*
GEORGE GREENSTEIN
2500 Eutaw Pl., Baltimore, Md. 21217
LEONARD G. HAMBERRY
1200 E. 36th St., Baltimore, Md. 21218
G. KENNETH HAWKINS
77 Highland Ave., Glen Ridge, N. J. 07028
JOHN C. HEALY
1305 Francis Ave., Baltimore, Md. 21227
STANLEY W. HENSON, JR.
Lemay Med. Bldg., Suite 5, Ft. Collins, Colo.
80521
PHILIP W. HEUMAN
307 Hickory Ave., Bel Air, Md. 21014
GRACE HOFSTETER
214 Dartmouth, S.W., Canton, Ohio 44710
IRVIN G. HOYT
Queenstown, Md. 21658
SARAH V. HUFFER
5705 Roland Ave., Baltimore, Md. 21210
JOHN C. HYLE
4101 Taylor Ave., Baltimore, Md. 21236
MAXWELL IBSEN
1548 Lincoln Ave., San Jose, Calif. 95125
ROY D. JENSEN
23 Warford Terr., Orinda, Calif. 94563
FRANK T. KASIK, JR.
9005 Harford Rd., Baltimore, Md. 21234

- GORDON WM. KELLEY
6124 41st Ave., Hyattsville, Md. 20782
- VIRGIL E. KNIGHT
Kimberly, Idaho
- FRANK G. KUEHN
1511 Cranwell Rd., Baltimore, Md.
- THOMAS F. LEWIS
Algonquin Hotel, Cumberland, Md. 21502
- JOSEPH D. LICHTENBERG
2200 Crest Rd., Baltimore, Md. 21209
- DOROTHEA A. MILLER LINLEY
R.D. 3, Fairfield, Conn. 06432
- GEORGE W. MARTIN, JR.
1504 Marsh Rd., Wilmington, Del. 19803
- WILBERT H. McELVAIN
108 Thornell, San Antonio, Tex. 78235
- ROBERT E. MILLER
Jessup, Ga. 31545
- HUNTER S. NEAL
312 Lankenau Med. Bldg., Philadelphia, Pa. 19151
- JULIO NOGUERA
2100 Corlies Ave., Neptune City, N. J. 07753
- JOSEPH E. O'MALLEY
44 W. Underwood Ave., Orlando, Fla. 32806
- EVANGELINE M. POLING
325 S. Main St., Philippi, W. Va. 25416
- WM. B. REVER, JR.
1306 Dulaney Valley Rd., Baltimore, Md. 21204
- LOUIS F. REYNAUD
1278 Gordon St., S.W., Atlanta, Ga. 30310
- V. M. GOULD REYNAUD
1278 Gordon St., S.W., Atlanta, Ga. 30310
- PAUL F. RICHARDSON
511 Gun Rd., Baltimore, Md. 21227
- MILTON R. RIGHETTI
290 Lewelling Blvd., San Lorenzo, Calif. 94580
- OLIVER RALPH ROTH
412 Second National Bk. Bldg., Ashland, Ky. 41101
- SEYMOUR RUBIN
3312 Olympia Ave., Baltimore, Md. 21215
- NORMAN E. RUDY
10921 Wilshire, Los Angeles, Calif. 90024
- ROBERT SANDLER
3303 Terrapin Rd., Baltimore, Md. 21208
- FREDERICK P. SHEPHERD
Box 1378, Louisville, Ky. 40201
- FREDERIC R. SIMMINS
135 Bdwy., Daytona Beach, Fla. 32018
- WM. O. SIRES
69 Sherman St., Fairfield, Conn.
- ALLEN L. SKLAR
Kings Beach, Calif. 95719
- MORTON SMITH
1249 5th Ave., New York, N. Y. 10029
- ANDREW R. SOSNOWSKI
4016 Ritchie Hwy., Baltimore, Md. 21225
- RAYMOND C. SPAULDING, JR.
Naval Hospital, Bethesda, Md. 20014
- HENRY H. STARTZMAN, JR.
1211 Doves Cove Rd., Baltimore, Md. 21204
- MICHAEL C. J. SULKA
Box 107, Weirton, W. Va. 26062
- ROBERT T. THIBADEAU
3720 Farragut Ave., Kensington, Md. 20795
- WM. W. THOMPSON
854th Med. Group, Malmstrom AFB, Mont.
- BATE C. TOMS, JR.
21 Starling Ave., Martinsville, Va. 24112
- ALBERT L. UPTON
1197 A St., Hayward, Calif. 94541
- KORNELIUS VAN GOOR
26 Sheldon Ave., S.E., Grand Rapids, Mich. 49502
- ENRIQUE VICENS
Edit. Prof. 3A-Concordia 31, Ponce, P. R. 00907
- FOWLER F. WHITE
59 Field St., Torrington, Conn. 06790
- CLIFFORD E. WILSON
7 Clinic Dr., Norwich, Conn. 06360
- ERNEST S. WOLF
55 E. Washington St., Chicago, Ill. 60602
- HARRIET HUSTED WOOTEN
1807 Circle Dr., Greenville, N. C.
- WM. H. YEAGER, JR.
1800 Conn. Ave., N.W., Washington, D. C. 20009

**10th Year Reunion
Class of 1955
Captain: Donald H. Dembo, M.D.**

- JOHN G. ALBRECHT
250 Williams St., Los Gatos, Calif. 95030
- GEO. K. BAER
680 Centre St., Brockton, Mass. 02402
- STANLEY P. BALCERZAK, JR.
Swallow Hill Rd., Carnegie, Pa. 15106

ALUMNI ASSOCIATION SECTION

JAMES J. BALL
Madigan Genl. Hosp., Ft. Lewis, Wash. 98431

ROBERT M. BARNETT
5702 Alameda, Baltimore, Md. 21212

E. E. BENITEZ-VAN RHYN
6322 Windsor Mill Rd., Baltimore, Md. 21207

OTTO C. BEYER
11 E. Chase St., Baltimore, Md. 21202

NORMAN BLANKMAN
1114 Cathedral St., Baltimore, Md. 21201

ALBERT B. BRADLEY
4900 Belair Rd., Baltimore, Md. 21206

PHILIP C. BRUNSCHWYLER
1025 Vermont Ave. N.W., Washington, D. C.
20025

FOSTER L. BULLARD
Mobile Genl. Hosp., Mobile, Ala. 36617

DONALD C. CAMERON
407 Milltown Rd., Wilmington, Del. 19808

NEAL C. CAPEL
4901 S. State St., Murray, Utah

JOSEPH W. CAVALLARO
Catawba Hosp., Newton, N. C.

RODERICK E. CHARLES
462 Grider St., Buffalo, N. Y. 14215

JAMES M. CLOSE
2nd Genl. Hosp., APO 180, New York, N. Y.
10000

JONAS K. COHEN
Boston, Mass.*

ROGER W. COLE
490 N. Alvernon, Tucson, Ariz. 85711

ROGER C. CORNELL
1930 N. Underwood, Arlington, Va. 22205

EVERARD F. COX
914 Prestwood Rd., Baltimore, Md. 21228

MARY VIOLA DALY
606 Orchard Dr., Albion, Mich. 49224

THEODORE A. DANN
USAF Hospital, Norton AFB, Calif. 92409

JOHN J. DARRELL
9017 Liberty Rd., Randallstown, Md. 21133

THOMAS E. DAVIS
1111 Carson St., Silver Spring, Md.

DONALD H. DEMBO
827 Linden Ave., Baltimore, Md. 21215

HENRY A. DIEDERICHS
St. Vincent De Paul, Norfolk, Va. 23505

WILLIAM DVORINE
607 Kahn Dr., Baltimore, Md. 21208

JOHN A. ENGERS, JR.
407 Gun Rd., Baltimore, Md. 21227

JOSEPH C. ESHELMAN
Mather, Pa.

MARTIN J. FELDMAN
1 Cherry Hill Rd., Reisterstown, Md. 21136

JAMES N. FREDERICK
603 Sussex Rd., Baltimore, Md. 21204

GEORGE H. FRISKEY
4815 Wilkens Ave., Baltimore, Md. 21228

C. BARTON GALLOWAY
104 W. Madison, Baltimore, Md. 21201

JOHN R. GAULD
10009 Big Rock Rd., Silver Spring, Md. 20901

VERNON M. GELHAUS
700 Stamford Rd., Baltimore, Md. 21229

GEORGE E. GIFFORD
R.D. 2, Rising Sun, Md. 21911

GEO. T. GILMORE
Lanham Bldg., Lutherville-Timonium, Md.
21093

JULIAN R. GOLDBERG
6609 Reisterstown Rd., Baltimore, Md. 21215

M. A. GOLDINER
Univ. of Calif., San Francisco, Calif. 94122

GARY S. GOSHORN
1011 Greenacre Rd., Baltimore, Md. 21204

DANIEL B. HARRIS
2613 Cylburn Ave., Baltimore, Md. 21215

ALVIN W. HECKER
403 Ritchie Hwy. N.E., Glen Burnie, Md.
21061

HARRY H. HERBST
City of Hope, Duarte, Calif.

HENRY B. HIGMAN
Dept. of Neurology, Presby.-St. Lukes Hosp.,
New York, N. Y. 10025

WALTER N. HIMMLER
412 Mechanic St., Cumberland, Md. 21502

WILLIAM HOLLISTER, JR.
Med. Arts Bldg., Fredericksburg, Va.

PAUL C. HUDSON
2 E. Read St., Baltimore, Md. 21202

JAMES L. HUGHES
U. S. Naval Hosp., Camp LeJeune, N. C. 28542

ALFRED E. IWANTSCH
11520 Grandview Ave., Silver Spring, Md.
20902

WALTER E. JAMES
5550 Baltimore Natl. Pike, Baltimore, Md.
21228

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- MURRAY KAPPELMAN
4726 Old Ct. Rd., Baltimore, Md. 21208
- WM. PETER KEEFE
140 Woodland St., Woodland Med. Ctr.,
Hartford, Conn. 06105
- JAMES T. KEEGAN
62 Prospect Dr., Milford, Conn. 06464
- LOUIS E. KIMMEL, JR.
925 Lenton Ave., Baltimore, Md. 21212
- DANIEL DENOON KING
215 S. Main St., Reidsville, N. C. 27320
- WM. H. KIRBY, JR.
7731 Greenview Terr., Baltimore, Md. 21204
- YALE L. KLUGMAN
N. C. Mem. Hosp., Chapel Hill, N. C. 27514
- CHARLES R. KOONS
617 Stevenson La., Baltimore, Md. 21212
- MORTON D. KRAMER
Marylander Apts.
3501 St. Paul St., Baltimore, Md. 21218
- VIOLET S. KRONE
1224 Green Tree La., Penn Valley, Narberth,
Pa.
- WM. F. KRONE, JR.
121 Cathedral St., Annapolis, Md. 21401
- ROBERT C. LANCASTER
Mercy Hosp., Calvert & Saratoga, Baltimore,
Md. 21202
- NORMAN W. LAVY
600 N. Alabama St., Indianapolis, Ind. 46204
- RICHARD F. LEIGHTON
2559 Cranford Rd., Columbus, Ohio 43221
- ERNEST A. LEIPOLD, JR.
914 Genine Dr., Glen Burnie, Md. 21061
- ANTHONY A. LEWANDOWSKI
309 E. Orchard Ave., Baltimore, Md. 21225
- FRANK W. LONGO
Columbia Presby. Med. Ctr., 622 W. 168th St.,
New York, N. Y. 10032
- SIDNEY M. LYTTON
51 E. 90th St., New York, N. Y. 10028
- JOHN P. MCGOWAN
USPHS Hosp., Baltimore, Md. 21211
- DAVID B. MCINTYRE
45 Holmehurst Ave., Baltimore, Md. 21228
- JACK H. MENDELSON
Box 449, Mass. Genl. Hosp., Boston, Mass.
02114
- VINCENT S. MIKOLOSKI
36 Pleasant St., Worchester, Mass. 01608
- ALBERT L. MOONEY
1156 Ave. B, Perry Point, Md. 21902
- GEORGE MORNINGSTAR
106 E. Main St., Emmitsburg, Md. 21727
- LEONARD J. MORSE
54 Goldthwait Rd., Worcester, Mass. 01605
- PAUL G. MUELLER
6411 Belair Rd., Baltimore, Md. 21206
- JAMES T. MURPHY
La Crosse Clinic, La Crosse, Wisc.
- FRANK NATARO
92 Wolcott Rd., Levittown, N. Y. 11756
- JAMES P. NEELEY
225 E. 4th North Rd., Logan, Utah 84321
- GEO. N. POLIS
1401 16th St., N.W., Washington, D. C. 20036
- ROBERT POPPIE
507 Washington St., Brainerd, Minn. 56401
- CHAS. B. PRATT
8503 Patterson Ave., Richmond, Va. 23229
- JOAN RASKIN
6221 Greenspring Ave., Baltimore, Md. 21209
- ALBERT M. SAN
5 Woodlawn Ave., Great Neck, N. Y. 11021
- JOHN E. SCHANBERGER
Naval Hosp., Philadelphia, Pa. 19145
- ROBERT G. SHIREY
Lewisburg, W. Va. 24901
- RICHARD E. SMALL
825 S. Queen St., York, Pa. 17403
- C. M. SNYDER
VA Hosp., Ft. Howard, Md.
- ALEXANDER SPOCK
Duke Med. Center, Durham, N. C. 27706
- PHILLIP G. STAGGERS
Keyser, W. Va. 26726
- WM. STERLING
2412 Colston Dr., Silver Spring, Md. 20910
- D. W. STEWART
3414 Duvall, Baltimore, Md. 21216
- JOS. E. STITCHER
U. S. Naval Hosp., Bethesda, Md. 20014
- KARL E. SUSSMAN
2465 S. Downing St., Denver, Colo. 80210
- PETER THORPE
409 Columbia Rd., Ellicott City, Md. 21043
- F. R. WALTON
Naval Hospital, Chelsea, Mass. 02150
- ANN MARIE WARD
43 Bobwhite La., Hicksville, N. Y. 11801

ALUMNI ASSOCIATION SECTION

C. C. WELLING
11 S. 1st W., Bountiful, Utah
HERBERT L. YOUSEN
2525 Eutaw Pl., Baltimore, Md. 21217

5th Year Reunion

Class of 1960

Captain: Benjamin J. Feola, M.D.

ARISTIDES ALEVIZATOS
6313 Holly Lane Apts., Baltimore, Md. 21212

LAWRENCE F. AWALT
1200 Dublin Ct., Lutherville, Md. 12321

JOHN J. BENNETT
5332 Freedom St., Harrisburg, Pa. 17112

LEONARD P. BERGER
6303 Lincoln Rd., Baltimore, Md. 21209

A. WM. BERTUCH
USN Support Act., Navy 570, Box 19,
Fleet P. O., N. Y., N. Y.

HERMAN BRECHER
443 E. 25th St., Baltimore, Md. 21218

ARNOLD BRENNER
5913 Western Run Dr., Baltimore, Md. 21215

DONALD BROWN
24735 Rennselaer, Oak Park, Mich.

SHERRILL C. CHEEKS
Greenmount, Md. 21072

JEREMY V. COOKE
Maine Med. Ctr., Portland, Me. 04102

LOUIS M. DAMIANO
9th Med. Disp., APO 162, N. Y., N. Y.

DONALD W. DATLOW
823 Union Blvd., Wheaton, Md.

PAUL A. DEVORE
3502 Hamilton St., Hyattsville, Md.

JAMES E. DUNN II
101 Mendoza, San Antonio, Texas 78235

STRATY H. ECONOMON
Box 4116, Arlington, Va. 22204

HAL D. FARLEY
Univ. of Pa., Philadelphia, Pa. 14104

MICHAEL JOSEF FELLNER
601 Kappock St., Apt. 2C, Riverdale, N. Y.
10063

BENJAMIN J. FEOLA
Univ. Hospital, Baltimore, Md. 21201

THOS. N. FERCIOT III
Battalion Surgeon, 9th Art. Aid Sta., APO
36, N. Y., N. Y.

JULIO E. FIGUERO LUGO
Cleveland Clinic, Cleveland, O. 44106

ALVIN GLASS
Abraham Jacobi Hosp., Bronx, N. Y. 10461

BURTON J. GOLDSTEIN
13835 S.W. 77 Ave., Miami, Fla. 33156

I. WILLIAM GROSSMAN
205 W. 15th St., N. Y., N. Y. 10011

FRANKLIN R. HAYDEN
Conneaut Valley Med. Ctr., Conneautville, Pa.

WILSON A. HEEFNER
4216 Eldone Dr., Baltimore, Md. 21229

GEORGE H. HENNING
226 E. Market, Georgetown, Del. 19947

JOHN D. HENSALA
Langly Porter N. P. Institute, 1079 Ashbury,
San Francisco, Calif. 94117

JEROME H. HERMAN
1165 Clermont St., Apt. 16, Denver, Colo.
80220

CHARLES E. HILL
603 Eliot Rd., Pasadena, Md. 21122

LAWRENCE F. HONICK
7269 B, Ft. Carson, Colo.

PAUL E. HUFFINGTON, JR.
943 W. Beverly St., Morgantown, W. Va.

HERBERT H. JAMES, JR.
6222 53rd St. N.E., Seattle, Wash. 98115

CHAS. R. KESMODEL
Martin Army Hosp., Ft. Benning, Ga.

RONALD E. KEYSER
5813 Wicklow Dr., Corpus Christi, Texas
78413

JAMES C. KING
University Hospital, Baltimore, Md. 21201

JOSEPH W. KURAD
945 S. Penn Ave., Winter Park, Fla.

PHILIP M. LAMASTRA
1300 Jeffers Ct., Baltimore, Md. 21204

CLEATIS E. LANEY
1312 Main St., Lubbock, Texas 79401

WM. E. LATIMER
Md. Genl. Hosp., Baltimore, Md. 21201

RICHARD C. LAVY
328 USAF Hosp., 5625 B, Bebour AFB, Mo.

MICHAEL H. LEAKAN
Duke Univ. Dept. of Pathology, Durham,
N. C. 27706

WALTER C. LESKY
921 Argonne Dr., Baltimore, Md. 21218

BULLETIN OF THE SCHOOL OF MEDICINE, UNIVERSITY OF MARYLAND

- HERBERT A. MARTELLO
205 Osborne Ave., Baltimore, Md. 21228
- JOHN J. MESSINA
University Hospital, Baltimore, Md. 21201
- PAUL D. MEYER
5600 Washington Blvd., Elkridge, Md. 21227
- DAMON F. MILLS
Cin. Gen. Hosp., Cincinnati, Ohio 45229
- JOHN C. MORTON
746 Summit Ave., Hagerstown, Md. 21740
- ALLAN R. MYERS
Univ. of Mich. Sch. PH, Ann Arbor, Mich.
- JERROD NORMANLY
Children's Memorial Hospital, Oklahoma
City, Okla. 73104
- FORTUNE ODEND'HAL, JR.
370 Morningview, Akron, Ohio 44305
- SELVIN PASSEN
Youngstown Hosp., Galeta & Gypsy Lane,
Youngstown, Ohio 44501
- MORTON I. RAPOPORT
Wm. Beaumont Genl. Hospital, Qtrs. 7469A,
Stemberg St., El Paso, Texas
- JEROME M. REED
Qtrs. S. 9, USN, Annapolis, Md.
- NEIL A. ROBINSON
Univ. of Md., Baltimore, Md. 21201
- CLINTON L. ROGERS
116 Center St., Keyser, W. Va.
- JEROME ROSS
3680 Forest Hill Rd., Baltimore, Md. 21207
- JERRY SALAN
University Hosp., Baltimore, Md. 21201
- ROBERT P. SARNI
1200 Reservoir Ave., Cranston, R. I. 02910
- ELIJAH SAUNDERS
3002 N. Hilton St., Baltimore, Md. 21216
- BRUCE G. SAVILLE
Presby.-St. Lukes Hosp., 1753 Congress Pky.,
Chicago, Ill. 60612
- JONAS A. SHULMAN
3204 W. Concord Way, Mercer Island,
Seattle, Wash.
- BERNICE SIGMAN
Univ. of Washington, Seattle, Wash. 98105
- EMANUEL H. SILVERSTEIN
Copper Beach Club, South #94 A, 1250
Providence Rd., Secane, Pa.
- GABOR SIMOR
Address unknown.
- CHARLES P. SMITH, JR.
70 Thayer St., Ft. Leonard Wood, Mo.
- GEO. I. SMITH, JR.
6486 USAF Dispensary, PACAF APO 953,
San Francisco, Calif.
- MORTON E. SMITH
Ophthalmic Pathology Br., Armed Forces
Inst. Path., Washington, D. C. 20025
- J. W. E. STANDIFORD
825 Med. Gr., Castle AFB, Calif.
- MARTHA E. STAUFFER
Malloy Inst. Path., Boston City Hosp.,
Boston, Mass. 02118
- NATHAN STOFBERG
48208 N. Brooks, Selfridge AFB, Mich. 48046
- JOHN R. STRAM
9117 Fernwood Rd., Bethesda, Md. 20014
- MERRILL T. SYPHUS
Huntington Mem. Hosp., Pasadena, Calif.
91105
- MICHAEL S. TENNER
824 Beaumont Ave., Baltimore, Md. 21212
- THEODORE F. TOULAN
715 West Hills Pkwy., Baltimore, Md. 21229
- HAROLD R. TRITCH, JR.
302 N. Potomac St., Hagerstown, Md. 21740
- CHARLES B. VOLCJAK
US Naval Hosp., St. Albans, N. Y. 11425
- JOHN W. WALLACE
3432 S. 3635 E, Salt Lake City, Utah 84109
- FRANK W. WASHINGTON
4711 Forest Pk. Ave., Baltimore, Md. 21207
- HUBERT R. WHITE, JR.
303 Brewington Dr., Salisbury, Md. 21801
- JAMES A. YATES
6669 Northumberland St., Pittsburgh, Pa.
15217
- DONALD L. YOUNG
35 Stonepoint Pl., San Mateo, Calif. 94402
- LOIS A. YOUNG
D. C. Genl. Hospital, Washington, D. C. 20003
- EDWIN G. ZALIS
97th Genl. Hosp., APO 757, N. Y., N. Y.
- THEODORE ZANKER
Cin. Genl. Hosp., Cincinnati, Ohio 45229

Minutes of Board of Directors

The board of directors of the Medical Alumni Association of the University of Maryland held three meetings in 1964 after the annual meeting in May, viz.: June 25, September 14 and November 12.

At the June meeting a review of the proceedings of the annual meeting disclosed that through inadvertence elective members to the Nominating Committee had not been proposed and as a result a vacancy existed. Since the Board is invested with authority to transact all business during the interval between annual meetings a unanimous vote empowered the President to fill the vacancy by appointment.

A statement covering the financial experience involved in sharing in the Maryland Medical Reunion was presented as a matter of information and for the record.

Thursday, June 3, 1965, was the chosen date for Alumni Day next year and The Lord Baltimore the hotel of choice. An invitation extended by the new Holiday Inn adjacent to the campus was investigated by an appropriate committee but the facilities there found to be inadequate.

Drs. Howard B. Mays and John O. Sharrett were announced as co-chairmen for the 1965 alumni activities program.

A letter over the signature of Dr. William Mosberg advocating some type of tribute being paid Dr. Samuel A. Mudd, Class of 1856, during the 1965 exercises, was read and the suggestion taken under consideration.

The September meeting was held at the Baltimore Union with President Franz, President-elect Scarborough and nine members present. Dr. Wagner, Editor of the *BULLETIN*, was present by invitation, and the Secretary to record proceedings.

Dr. Franz announced that the date selected for the 1965 reunion, June 3, had been confirmed. Dr. Scarborough pointed out that a second Maryland Medical Reunion to be held in 1966 was in prospect. He agreed to get in touch and work with all the groups involved to the end that all possible delays might be avoided. The question of holding an alumni reunion in Memphis, Tenn., during the meeting of the Southern Medical Association, was debated at some length and the ultimate decision reached to forego the effort this year.

An opinion was expressed that the alumni association should promote and actually produce an Oyster Roast some time during the season. The suggestion met with interested consideration. Dr. Triplett was directed by motion to determine an estimated cost per person and report at the next meeting.

The proposition of honoring the memory of Dr. Samuel A. Mudd during the 1965 program was favorably considered. President Franz volunteered to consult Dean Stone, solicit his interest and invite his cooperation in developing something to appropriately memorialize such a distinguished alumnus. Dr. Wagner was authorized by motion to publicize in the October *BULLETIN* the fact the 1965 program would contain memorial reference to Dr. Mudd.

Dr. Franz reported the appointment of the following to the Nominating Committee: Drs. Raymond Cunningham, David Levy and Donald W. Mintzer.

Dr. Wagner invited attention to the fact the *BULLETIN* will be 50 years old in 1965. He would like to bring out a special anniversary number but the financial

Treasurer's Report of the Medical Alumni Association

STATEMENT OF CASH RECEIPTS AND EXPENDITURE

Cash Balances, May 1, 1963:

Maryland National Bank—BULLETIN Fund	\$ 654.44		
—Alumni Fund	(113.97)	\$ 540.47	
Eutaw Savings Bank—Funded Reserve		15,322.80	
Baltimore Federal Savings & Loan Association—			
Student Loan Fund		1,441.26	\$17,304.53

Receipts:

BULLETIN Fund—Contributions		\$ 6,234.00	
Alumni Fund:			
Dues	\$14,560.25		
Annual Banquet	6,352.50		
Ladies' Lunch	100.75		
Ladies' Tour	12.50		
Board Meeting Dinner Reimbursements	35.72	21,061.72	
Funded Reserve—Interest		579.95	
Student Loan Fund:			
Contributions	\$ 330.00		
Interest	36.25	366.25	28,241.92
TOTAL CASH TO ACCOUNT FOR			<u>\$45,546.45</u>

Expenditures:

BULLETIN Fund:			
Fee	\$ 1,000.00		
BULLETIN Account—			
University of Maryland	4,100.00	\$ 5,100.00	
Alumni Fund:			
Salaries	\$ 4,312.36		
Honorarium	500.00		
Payroll Taxes	150.33		
Printing and Office Supplies	734.35		
Postage	356.00		
Alumni Day (1963) Expense	4,446.12		
Alumni Day (1964) Expense	564.45		
Board Meeting Luncheon	33.00		
Year Book ad—School of Medicine	50.00		
Year Book ad—School of Nursing	35.00		
S. M. A. Luncheon	232.76	11,414.37	
Student Loan Fund:			
Loan—B. W. G.	\$ 400.00		
Loan—J. A. K.	400.00	800.00	
TOTAL EXPENDITURES			<u>\$17,314.37</u>

the University of Maryland

R THE YEAR ENDED APRIL 30, 1964

Cash Balances, April 30, 1964:

Maryland National Bank—BULLETIN Fund	\$ 1,788.44	
—Alumni Fund	4,433.38	\$ 6,221.82
—Savings Account.....	*5,000.00	
Eutaw Savings Bank—Funded Reserve.....	15,902.75	
Baltimore Federal Savings & Loan Association—		
Student Loan Fund.....	1,007.51	
Cash on Hand—Alumni Day Change Fund.....	* 100.00	28,232.08
TOTAL CASH ACCOUNTED FOR.....		<u>\$45,546.45</u>

* Transfer of funds from Alumni Fund.

Student loans of \$4,900.30 were outstanding at April 30, 1964.

strain cannot be met without considerable support.

The November, 1964 meeting was held at the Baltimore Union on the 12th. The Treasurer rendered a current report and in addition a comparative expense experience in presenting the 1963 program and sharing in the 1964 Maryland Medical Reunion.

The Committee appointed to nominate a candidate to receive the 1965 Honor Award submitted its report which carried the name of Dr. Theodore McCann Davis, Class of 1914.

President Franz reported that Class Captains for all class reunions with one exception had accepted appointment.

Dr. Triplett reported that an Oyster Roast could be held at Ridgeway Inn for \$4.75 per person. Dr. Goldstein's motion that a roast be held the latter part of February carried. The President took the appointment of a committee under advisement.

President Franz reported that Dean Stone will present to the Faculty Board

the proposition of honoring Dr. Samuel A. Mudd and make it a joint Faculty-Alumni program.

A discouraging report was read from Dr. George Yeager relative to an Alumni-Faculty Facility near the campus, a proposition under consideration by interested groups for some time past. Little progress has been made and further meetings are planned.

Dr. Wagner spoke realistically about the BULLETIN, the revered place the Medical Writers Assn. holds for it, the fact it is reported to be among the first ten in the field where regional interest takes precedence.

Upon motion of Dr. Wells, seconded by Dr. McNally, the treasurer was authorized to send to the BULLETIN the sum of \$2000.00 to support the Editor in his effort to bring forth a Special 50th Anniversary number.

Respectfully submitted,

THOMAS B. CONNOR, M.D.
Secretary

Roster of Senior Alumni to Be Maintained

At the annual Medical Alumni Association banquet in 1964, the president of the Alumni Association presented to the 50 year graduates of the three schools, their 50-year diplomas. This was the last for the alumni of the Baltimore Medical College, the last class being graduated in June 1914. In 1965 a similar event will mark the last 50 year class for the College for Physicians and Surgeons. The alumni of the three schools will then become a single body.

It is proposed that so long as they shall live, the individual alumni of the Baltimore Medical College and the College for Physicians and Surgeons shall be listed in the BULLETIN of the School of Medicine each year, so that the identity of these physicians can properly be maintained.

In addition, the Medical Alumni Association proposes to list all known graduates of the School of Medicine of the University of Maryland including this group with the B. M. C.-P & S group under the heading "Senior Alumni." Each year the BULLETIN will publish this directory as a reminder that a large group of active and distinguished alumni are still in the practice of medicine a half century or more after graduation.

The School and the Alumni Association do not propose to forget these honored members subsequent to their receiving the 50-year diploma. Instead, the younger men might well refer to this senior group for advice (there are over 400 living alumni in practice more than 50 years) and counsel.

Senior Alumni

BALTIMORE MEDICAL COLLEGE

WILLIAM CLAY ABEL, M.D., 1901
2314 Trace Ave.
Orlando, Fla.

ELMER JOS. BEAULIEU, M.D., 1907
Whitman, Mass.

WILLIAM F. BECKNER, M.D., 1911
713 West Virginia Bldg.
Huntington, W. Va.

FREDERICK VICTOR BEITLER, M.D., 1906
1014 Francis Ave.
Baltimore, Md. 21227

HARRY JOHN BENNETT, M.D., 1906
121 N. Julian St.
Ebensburg, Pa.

RUSSELL E. BLAISDELL, M.D., 1906
200 Braunsdorf Rd.
Pearl River, N. Y.

LAWRENCE F. BOLAND, M.D., 1911
P. O. Box 403
Frankfort, Ky.

CHARLES F. BOVE, M.D., 1913
70 E. Main St.
Pachogue, N. Y.

LEE BRANSFORD, M.D., 1910
1282 Mayfair Rd.
Jacksonville, Fla.

FRANK J. BROSCART, M.D., 1911
8 Russell Ave.
Gaithersburg, Md.

JOSEPH EDWARD BRUMBACK, M.D., 1909
Medical Arts Building
Baltimore, Md. 21201

LAWRENCE A. CAHILL, M.D., 1911
361 Lafayette St.
Newark, N. J.

FRED GLOVER CAMPBELL, M.D., 1911
Warren, Me.

JESSE W. CAMPBELL, M.D., 1909
923 Philadelphia St.
Indiana, Pa.

FLETCHER F. CARMAN, M.D., 1901
2 Parkway
Montclair, N. J.

LOUIS CHARGIN, M.D. 1902
1 W. 85th St.
New York City, N. Y. 10024

HENRY L. CRISS, M.D., 1905
218 Adams St.
Fairmont, W. Va.

ALUMNI ASSOCIATION SECTION

Senior Alumni (Cont.)

JAMES DePASQUALE, M.D., 1908
530 E. 234th St.
Bronx, N. Y. 10470

VIVIAN P. EDWARDS, M.D., 1909
27 Hillside Dr.
Kingston, Pa.

JOHN EVANS, M.D., 1903
7003 York Rd.
Baltimore, Md. 21212

REMO FABRI, M.D., 1909
173 Markley St.
Norristown, Pa.

DAWSON L. FARBER, M.D., 1913
942 Dulaney Valley Rd.
Baltimore, Md. 21204

LOYD H. FEICK, M.D., 1902
807 N. 10th St.
Reading, Pa.

EDGAR T. FLINT, M.D., 1901
44 E. Somerset St.
Raritan, N. J.

JAMES C. FRYE, M.D., 1911
407 First St.
Williamsburg, Pa.

GEORGE WASHINGTON GAULT, M.D., 1910
112 Walnut Street
Harrisburg, Pa.

HENRY JAMES GIAMARINO, M.D., 1906
291 Whitney Ave.
New Haven 11, Conn.

GUSTAVE A. GORISSE, M.D., 1911
7329 Kings Run Rd.
Dayton, Ohio 45459

ARTHUR RICHARD GOULD, M.D., 1903
70 El Portal
Greenbrae, Calif.

DON U. GOULD, M.D., 1905
N. Main St.
Sherburne, N. Y.

CHARLES JACOB GREENSTEIN, M.D., 1912
300 Main St.
New Britain, Conn.

GLENN G. HAIGHT, M.D., 1910
Audubon, Minn.

JOHN J. H. HILTON, M.D., 1912
336 Haverhill St.
Lawrence, Mass.

ERNEST G. HUMMELL, M.D., 1902
250 Wyncote Rd.
Jenkintown, Pa.

LEON PETER JANKIEWICZ, M.D., 1906
914 State St. Utica, N. Y.

HOWARD MARTIN KEMP, M.D., 1911
Colrain Rd.
Shelburne Falls, Mass.

GEO. BREON KIRK, M.D., 1898
Kylertown, Pa.

CHAS. BYRON KORNIS, M.D., 1909
Sipesville, Pa.

JULIUS JOS. KVATSACK, M.D., 1910
3521 California Ave.
Pittsburgh, Pa.

WM. E. VAN LANDINGHAM, M.D., 1905
328 Dyer Ave.
West Palm Beach, Fla.

FRANK V. LANGFITT, M.D., 1907
227 Carr Ave.
Clarksburg, W. Va.

J. WALTER LAYMAN, M.D., 1910
5 Public Square
Hagerstown, Md.

BERNARD LIVINGSTON, M.D., 1908
535 S. Shore Dr.
Miami Beach, Fla.

THOMAS PETERSON LLOYD, M.D., 1896
1030 Highland Ave.
Shreveport, La.

ARTHUR M. LOOFE, M.D., 1898
125 N. Main St.
Cortland, N. Y.

S. M. MAGARIAN, M.D., 1905
453 Chestnut St.
Long Beach, Calif. 90812

ERNEST G. MARR, M.D., 1913
516 Cathedral St.
Baltimore, Md. 21201

WM. REGINALD MARSHALL, M.D., 1908
22 Broad St.
Lynn, Mass.

WM. P. MCGUIRE, M.D., 1903
Wylliesburg, Va.

HENRY HUPP McINTIRE, M.D., 1907
406 Green St.
Connellsville, Pa.

JOHN LEWIS MEEKER, M.D., 1903
6 DeBarry Place
Summit, N. J.

CARL F. MILLER, M.D., 1904
5554 Delmar
St. Louis, Mo.

SAMUEL MILLER, M.D., 1912
2807 Arthur St.
Hollywood, Fla.

ALFRED NEWTON MOORE, M.D., 1903
Oakland, Ill.

Senior Alumni (Cont.)

EMMETT A. MOORE, M.D., 1908
Box 247
Newark, O.

GEO. W. MURGATROYD, M.D., 1910
401 E. 25th St.
Baltimore, Md. 21218

VICTOR CORNELIUS NAH, M.D., 1913
301 N. Van Buren St.
Wilmington, Del. 19805

WALTER IRVING NELLER, M.D., 1910
121 Wickham Ave.
Middletown, N. Y.

ARTHUR M. O'CONNOR, M.D., 1909
Lee, Mass.

MICHAEL J. O'CONNOR, M.D., 1906
98 Shanley Ave.
Newark, N. J.

JULIUS G. PAIDER, M.D., 1900
405 W. 72nd St.
New York, N. Y. 10021

HAROLD H. PALMER, M.D., 1908
36 S. Main St.
Plymouth, N. H.

PAUL JONES PARKER, M.D., 1910
Hampton, Va.

BENJAMIN PARVEY, M.D., 1907
636 Beacon St.
Boston, Mass.

THOMAS E. PATTESON, M.D., 1909
Dillwyn, Va.

CHARLES J. PFLUEGER, M.D., 1905
460 Ardmore St.
Los Angeles, Calif. 90005

GEO. HENRY PFLUEGER, M.D., 1906
40 Dole Ave.
Crystal Lake, Ill.

GEORGE PINESS, M.D., 1913
240 S. LaCienega Blvd.
Beverly Hills, Calif.

RAYMOND VINCENT QUINLAN, M.D., 1910
5 State St.
Meridan, Conn.

JOHN F. QUINN, M.D., 1906
81 Arcadia Ave.
Bridgeport, Conn.

ROBERT PHILLIP REAGAN, M.D., 1908
345 Coudry St.
North Tonawanda, N. Y.

RALPH G. REED, M.D., 1908
330 Elmore St.
Central Islip, N. Y.

ENRIQUE LASISSE Y RIVERA, M.D., 1913
Box 216
Sabana Grande, P. R.

JACOB ROEMER, M.D., 1906
365 S. Westgate Ave.
Los Angeles, Calif. 90049
GEO. ROSENBAUM, M.D., 1905
Benson East
Jenkintown, Pa.

ROGER K. SELL, M.D., 1913
Torrington, Wyo. 82240

CHARLES L. SHAFFER, M.D., 1907
725 East Main St.
Somerset, Pa.

MAURICE E. SHAMER, M.D., 1910
3300 W. North Ave.
Baltimore, Md. 21216

HENRY OSCAR SLOANE, M.D. 1908
1717 Pine St.
Philadelphia, Pa.

EARL H. SNAVELY, M.D., 1905
737 Valencia Ave.
Coral Gables, Fla. 33134

HUGH RAYMOND SPENCER, M.D., 1910
3900 N. Charles St.
Baltimore, Md. 21218

JAMES EARL SPRINGER, M.D., 1911
Peoples Bank Bldg.
Akron, Ohio

FRED E. STEELE, JR., M.D., 1907
Northampton, Mass.

JACOB J. STEINFELDER, M.D., 1907
924 West End Ave.
New York City, N. Y.

H. G. STEVENS, M.D., 1904
50 Bridge St.
New Milford, Conn.

JOHN D. STEVENSON, M.D., 1905
Seabreeze Ave.
Daytona Beach, Fla.

WILLIAM CARTER STONE, M.D., 1903
121 E. Green St.
Westminster, Md.

GEORGE LEWIS STRAUB, M.D., 1911
4117 Anderson Rd.
Coral Gables, Fla. 33146

WILLIAM J. TRAINOR, M.D., 1903
326 Virginia Circle
Wilmington, Ohio

RICHARD W. TREVASKIS, SR., M.D., 1911
220 Baltimore Ave.
Cumberland, Md.

ALUMNI ASSOCIATION SECTION

Senior Alumni (Cont.)

WILLIAM H. TRIPLETT, M.D., 1911
1038 Lakemont Rd.
Baltimore, Md. 21228
EARL B. WEIBLE, M.D., 1910
Abercrombie, N. Dak.
ERNEST L. WILSON, M.D., 1911
10509 Stone Ave.
Seattle, Wash. 98133

COLLEGE FOR PHYSICIANS AND
SURGEONS

A. W. ADKINS, M.D., 1912
361 Hillsboro St.
Lexington, Ky.
ANDREW A. ANDERSON, M.D., 1912
1101 Deseret Bldg.
Salt Lake City, Utah
OSCAR TODD BARBER, M.D., 1908
Health Officer
53 Temple St.
Fredonia, N. Y.
CARL J. BAUMGARTNER, M.D., 1911
4841 River Point Rd.
Jacksonville, Fla. 32207
LEWIS BERLIN, M.D., 1901
733 Shirland Ave.
Norfolk, Va. 23505
RAFAEL BERNABE, M.D., 1913
61 Savador Brau St.
San Juan, P. R.
HARRY MELCHIOR BIFFAR, M.D., 1912
144-31 14th Ave.
Flushing, N. Y. 11357
WILLIAM P. BLACK, M.D., 1914
111 Capitol St.
Charleston, W. Va. 25300
WALTER D. BLANKENSHIP, M.D., 1910
31 Sunset Place
Lancaster, Pa.
JAMES G. BLOWER, M.D., 1905
308 Rose Blvd.
Akron, Ohio 44302
O. H. BOBITT, M.D., 1914
863 24th Ave. N.
St. Petersburg, Fla. 33713
RAY MAXWELL BOBBITT, M.D., 1913
1139 4th Ave.
Huntington, W. Va.
WM. P. BONAR, M.D., 1906
1006 Tomlinson Ave.
Moundsville, W. Va.

HARRISON L. BREHMER, M.D., 1910
106 Girard Blvd., S.E.
Albuquerque, N. M.
JOS. STEWART BROWN, M.D., 1912
239 E. 3rd St.
Lewistown, Pa.
J. D. BULLA, M.D., 1888
R. D.
Trinity, N. C.
JOHN JOS. BURNE, M.D., 1910
101 N. Grove St.
East Orange, N. J.
OVID SYLVESTER CAMPBELL, M.D., 1910
119 W. Main St.
Grafton, W. Va.
MANUEL G. CARRERA, M.D., 1914
101 N. Union St.
Fajardo, P. R. 00648
OREL NATHAN CHAFFEE, M.D., 1906
820 Sassafra St.
Erie, Pa.
MORRIS DABKO COHEN, M.D., 1904
1534 E. Speedway
Tucson, Ariz.
C. MELVIN COON, M.D., 1903
Star Route
Milan, Pa.
EVERETT ROY COOPER, M.D., 1912
Troy, W. Va.
JOSEPH SHERMAN CRAIG, M.D., 1912
913 Lee St.
Summersville, W. Va.
DENIS J. CRONIN, M.D., 1910
1007 4th Ave.
Huntington, W. Va.
MATTHEW TOLBERT DALTON, M.D., 1906
6811 50th Ave., N.E.
Seattle, Wash. 98115
CHAS. W. DALY, M.D., 1910
139 Warrenton Ave.
Hartford, Conn. 06105
FREDERICK W. DAVIS, M.D., 1905
4250 Maricarr Dr.
Kettering, Ohio
GEORGE DAVIS, M.D., 1908
28 South Church St.
Waynesboro, Pa.
J. D. DINSMORE, M.D., 1909
Port Clyde
Nova Scotia, Canada
EDWARD P. DISBROW, M.D., 1908
15 Irving St., Apt. 9
Worcester, Mass.

Senior Alumni (Cont.)

JAMES SYLVESTER DIXON, M.D., 1913
33 Parsonage St.
Pittston, Pa.

JAMES CORBIN DOUGHTY, M.D., 1913
Onancock, Va.

JOHN H. DOYLE, M.D., 1902
775 Somerset Ave.
North Dighton, Mass.

JAMES FENDER EASTON, M.D., 1913
45 Rosemary Lane
Romney, W. Va.

SAMUEL E. ENFIELD, M.D., 1913
116 S. Liberty St.
Cumberland, Md.

DE WITT FAUCETT, M.D., 1909
630 Turrentine Ave.
Gadsden, Ala.

ISAIAH FEARING, M.D., 1896
203 W. Main St.
Elizabeth City, N. C.

CHARLES WM. FINNERTY, M.D., 1913
440 Broadway
Somerville, Mass.

PAUL N. FLEMING, M.D., 1913
8627 Fenton St.
Silver Spring, Md.

ERNEST F. FLORA, M.D., 1913
R. D. #1
Boones Mill, Va.

EDGAR B. FRIEDENWALD, M.D., 1903
Marlborough Apts., 1B
1701 Eutaw Place
Baltimore, Md. 21217

WM. T. GOCKE, M.D., 1911
207 W. Pike St.
Clarksburg, W. Va.

HARRIS GOLDMAN, M.D., 1910
3507 Garrison Blvd.
Baltimore, Md. 21215

ALBERT ELIAS GOLDSTEIN, M.D., 1912
3505 N. Charles St.
Baltimore, Md. 21218

ATTIE THOMPSON GORDON, M.D., 1914
Spencer, W. Va. 25276

GEORGE F. GRISINGER, M.D., 1910
2861 Piedmont Rd.
Charleston, W. Va.

NATHAN S. HANELLIN, M.D., 1911
419 80th St.
Brooklyn, N. Y. 11209

WM. R. HANRAHAN, M.D., 1905
127 Farmington Ave., Farmington, Conn.

J. A. HAROLD, M.D., 1903
Ottawa, Ohio

HOWARD CARRINGTON HEILMAN, M.D., 1914
Elderton, Pa.

ISIDOR HELLER, M.D., 1913
49 Brandon Rd.
Upper Darby, Pa.

ARTHUR WM. HIGGINS, M.D., 1907
McLain Bldg.
Wheeling, W. Va.

JOHN F. HOGAN, M.D., 1911
Box 113
Gibson Island, Md.

FRANCIS HUTCHINSON, M.D., 1911
485 E. Howard St.
Pasadena, Calif.

MANUEL R. JANER, M.D., 1912
697 West End Ave.
New York 25, N. Y.

JESSE J. JENKINS, M.D., 1914
Farmington, W. Va. 26571

FRANK LESLIE JENNINGS, M.D., 1911
Medical Arts Bldg.
Baltimore, Md. 21201

GAILE W. KAHLE, M.D., 1910
Marienville, Pa.

THOMAS FRANCIS KEATING, M.D., 1910
18675 Gainsborough
Detroit, Mich. 48223

HENRY W. KEATOR, M.D., 1892
14 Janet St.
Kingston, N. Y.

HARRY STANLEY KUHLMAN, M.D., 1914
Sharptown, Md.

ANTHONY W. LAMY, M.D., 1908
560 Newark Ave.
Elizabeth, N. J.

ALSTON HOWARD LANCASTER, M.D., 1903
997 Main St.
Worcester, Mass. 01603

HERBERT LEONARD LANGER, M.D., 1914
212 Beach 69th St.
Far Rockaway, N. Y. 11692

AUGUSTIN R. LAUGIER, M.D., 1914
Box 298
San Juan, P. R. 00902

ORAM R. LAWRY, SR., M.D., 1911
23 Oak St.
Rockland, Me.

JOSEPH LIPSKEY, M.D., 1914
Odenton (AA Co.), Md. 21113

ALUMNI ASSOCIATION SECTION

Senior Alumni (Cont.)

JOHN E. MAHER, M.D., 1914
96 Third Ave.
Long Branch, N. J. 07740
ALBERT EUGENE MANN, M.D., 1912
65 Central Park W.
New York 23, N. Y.
ERWIN MAYER, M.D., 1914
The Esplanade Apts.
Baltimore, Md. 21217
FREDERICK W. A. MAYER, M.D., 1903
1830 James Ave.
St. Paul, Minn. 55105
JOHN VINCENT McANINCH, M.D., 1914
308 W. Lincoln Ave.
McDonald, Pa. 15057
MORRIS I. MENDELOFF, M.D., 1912
Box 921
Charleston, W. Va. 25323
ISIDORE MICHEL, M.D., 1911
870 5th Ave.
New York, N. Y. 10021
HERMANS SIMMONS MILLER, M.D., 1911
609 Washington St.
Wilmington, Del.
DAVID CLINTON MOCK, M.D., 1904
215 Cajon St.
Redlands, Calif.
FRANK M. MOOSE, M.D., 1914
4501 Dalton Rd.
Chevy Chase, Md. 20015
CHARLES GROVER MORGAN, M.D., 1903
156 Santa Barbara St.
Corpus Christi, Tex.
SAMUEL J. MORRIS, M.D., 1912
205 Kingwood St.
Morgantown, W. Va.
CHARLES L. MOWRER, M.D., 1913
159 W. Washington St.
Hagerstown, Md.
LEO P. MUSSER, M.D., 1913
Rt. 3, 500 Vine Hill Way
Martinez, Calif. 94553
WM. EDGAR MYLES, M.D., 1913
102 W. Main St.
White Sulphur Springs, W. Va.
CHARLES FRANCIS NICOL, M.D., 1913
63 Prospect Pk. W.
Brooklyn, N. Y. 11215
SAML. WATSON PAGE, M.D., 1902
349 Stanley Ave.
Greenwood, S. C.

WILLIAM NEAVITT PALMER, M.D., 1905
136 S. Washington St.
Easton, Md.
ERNEST M. PERRY, M.D., 1907
125 Sunset Ave.
Rocky Mount, N. C.
WM. GARFIELD PHILLIPS, M.D., 1909
Skiatook, Okla.
WALTER W. POINT, M.D., 1913
Box 2567
Charleston, W. Va. 25329
JOHN T. H. POWERS, M.D., 1910
55 West St.
Leominster, Mass.
IVAN EMERSON PRATT, M.D., 1908
Main St.
Millerton, Pa.
DESAUSSER G. PRESTON, M.D., 1907
216 S. Jefferson St.
Lewisburg, W. Va.
NORMAN RANDOLPH PRICE, M.D., 1903
Box 64
Marlinton, W. Va.
MANUEL E. PUJADAZ-DIAZ, M.D., 1914
1611 Colon Ave.
Santurce, P. R. 00911
CLAYTON T. RALLS, M.D., 1904
104½ W. 9th Ave.
Winfield, Kan.
EDWIN R. RAYMALEY, M.D., 1904
1034 South Ave.
Pittsburgh, Pa. 15221
S. J. ROBERTS, M.D., 1912
1432 N. Second St.
Harrisburg, Pa.
JOSEPH J. ROHR, M.D., 1914
3705 Bohan St. N.E.
Roanoke, Va. 24012
JACOB L. ROSENSTEIN, M.D., 1905
568 Bergen Ave.
Jersey City, N. J. 07304
RAYMOND HARRISON RYDER, M.D., 1913
48 Central Ave.
Waterbury 2, Conn.
FRED C. SCHUMACKER, M.D., 1905
Chichester Road
Phoenicia, N. Y.
LEONARD O. SCHWARTZ, M.D., 1912
3421 Pennsylvania Ave.
Weirton, W. Va.
GEORGE H. SEAKS, M.D., 1904
New Oxford, Pa.

Senior Alumni (Cont.)

ELIAS C. SEGARRA, M.D., 1913
1803 Ponce de Leon Ave.
Santurce, P. R. 00929

HERMAN SEIDEL, M.D., 1910
2404 Eutaw Pl.
Baltimore, Md. 21217

ALBERT C. SHANNON, M.D., 1912
R. D. 1, Box 83
Mayport, Pa.

ARTHUR A. SHAWKEY, M.D., 1900
207 Beauregard St.
Charleston, W. Va.

RICHARD O. SHEA, M.D., 1914
25 Sanford Place
Bridgeport, Conn. 06604

IVY G. SHIRKEY, M.D., 1914
Albemarle Apts.
1830 17th St., N.W.
Washington, D. C. 20009

ARTHUR CHARLES SMITH, M.D., 1910
90 Deer Hill
Danbury, Conn.

ZIBA L. SMITH, M.D., 1906
West Nanticoke, Pa.

EDWARD WHARTON SPRAGUE, M.D., 1903
86 Washington St.
Newark, N. J.

BYRON WM. STEELE, M.D., 1914
Box 248
Mullens, W. Va. 24863

THOS. WM. STEVENSON, M.D., 1908
4421 Montaire Ave.
Long Beach 8, Calif.

FRANK GREGORY STRAHAN, M.D., 1914
Williamsville, Vt.

LETCHER E. TRENT, M.D., 1910
209 DeWitt Rd.
Syracuse, N. Y. 13203

KARL HADDON TRIPPETT, M.D., 1911
1st National Bank Bldg.
Grafton, W. Va.

JESSE R. TUCKWILLER, M.D., 1910
223 Monroe St.
Fairmont, W. Va.

ALFRED ULLMAN, M.D., 1902
1712 Eutaw Place
Baltimore, Md. 21217

THURMAN ELROY VASS, M.D., 1914
Box 167
Bluefield, W. Va. 24701

CLYDE W. VICK, M.D., 1905
2117 Jefferson St., Bluefield, W. Va.

PARKER NORMAN WENTZ, M.D., 1906
752 Kelly Dr.
York, Pa.

WM. A. WICKLINE, M.D., 1895
232 Rutherford Dr.
Danville, Calif.

LOUIS V. WILLIAMS, M.D., 1911
Route 7
York, Pa.

MAYES B. WILLIAMS, M.D., 1912
2000 Eoff St.
Wheeling, W. Va.

FRANCIS ROMAN WISE, M.D., 1908
129 E. Market St.
York, Pa.

WALTER DENT WISE, M.D., 1906
1120 St. Paul St.
Baltimore, Md. 21202

JOHN I. WISEMAN, M.D., 1907
1720 Gunther Apts., #4
Orlando, Fla.

CURTIS LEVI ZIMMERMAN, M.D., 1912
412 Cumberland St.
Lebanon, Pa.

WAITMANN F. ZINN, M.D., 1911
400 Coral Way
Ft. Lauderdale, Fla.

SCHOOL OF MEDICINE, UNIVERSITY OF MARYLAND

SAMUEL ALEXANDER, M.D., 1913
1830 Eye St., N.W.
Washington, D. C.

REESE ALEXANDER ALLGOOD, M.D., 1912
Pickens, S. C.

J. LELAND ANDERSON, M.D., 1908
68 Vardry St.
Medical Ct.
Greenville, S. C.

CHARLES WALLACE ARMSTRONG, M.D., 1914
1215 W. Innes St.
Salisbury, N. C. 28144

WALTER CATHCART ARTHUR, M.D., 1897
2225 Fifteenth St.
Cuyahoga Falls, Ohio

YATES MIDDLETON BARBER, M.D., 1914
Tidewater, Va.

PHILIP BEAN, M.D., 1913
Great Mills, Md.

GROVER CLEVELAND BEARD, M.D., 1912
2801 Hurdle Hill Rd.
Lynchburg, Va. 24503

ALUMNI ASSOCIATION SECTION

Senior Alumni (Cont.)

CLARENCE IRVING BENSON, M.D., 1909
Box 123
Port Deposit, Md.

GEORGE W. BISHOP, M.D., 1914
Box 32
Pasadena, Md.

HARRY ALOYSIUS BISHOP, M.D., 1912
3718 Manor Rd.
Chevy Chase, Md.

LOWRIE W. BLAKE, M.D., 1914
5609 7th Ave. Drive West
Bradenton, Fla.

ALVAH PARRISH BOHANNAN, M.D., 1905
Virgilina, Va.

ROBERT A. BONNER, SR., M.D., 1912
51 W. Main St.
Waterbury, Conn.

JAMES C. BROGDEN, M.D., 1914
108 W. Sixth St.
Tulsa, Okla. 74103

MORTON BROTMAN, M.D., 1914
212 South Orange Ave.
Apartment #10
South Orange, N. J.

ARCHIE EUGENE BROWN, M.D., 1911
918 Poinsett Hgwy.
Greenville, S. C.

JESUS MARIA BUCH, M.D., 1913
470 S. Chestnut St.
Ravenna, Ohio 44266

SIDNEY ELI BUCHANAN, M.D., 1912
390 S. Union St.
Concord, N. C.

FRANK BURDEN, M.D., 1905
#3 Bagshaw Ave.
Brighton, South Australia

IRA BURNS, M.D., 1905
Diplomatic Center, Apt. 517
Daytona Beach, Fla.

JULIAN G. BUSBY, M.D., 1904
901 W. Henderson St.
Salisbury, N. C.

HARRY ARTHUR CANTWELL, M.D., 1906
Cecil Ave.
North East, Md.

HENRY P. CARTER, M.D., 1903
3445-B S. Stafford St.
Arlington, Va.

ARTHUR CASILLI, M.D., 1914
618 Newark Ave.
Elizabeth, N. J. 07203

JOS. CATURANI, M.D., 1910
348 E. 116th St.
New York, N. Y.

CHAS. PETER CLAUTICE, M.D., 1912
3013 St. Paul St.
Baltimore, Md. 21218

HUBERT CLAYTOR, M.D., 1886
Hopkins, S. C.

JOSEPH COLEMAN, M.D., 1904
455 West 23rd St.
New York 11, N. Y.

CLARENCE E. COLLINS, M.D., 1902
"The Hygeia," Hall Highway
Crisfield, Md.

WM. STANISLAUS CONWAY, M.D., 1910
3210 E. Perkins Ave.
Sandusky, Ohio

EVERETT L. COOK, M.D., 1914
4125 Arkansas Ave., N.W.
Washington, D. C. 20011

EARLE SOMERVILLE COSTER, M.D., 1906
Solomons, Md.

GEORGE C. COULBOURN, M.D., 1910
Marion, Md.

FRANKLIN CLYDE CRAVEN, M.D., 1913
525 Sunset Ave.
Ashboro, N. C.

THOMAS DALTON CROUCH, M.D., 1910
Box 97
Stony Point, N. C.

GILBERT L. DAILEY, M.D., 1914
618 3rd St.
Harrisburg, Pa. 17101

THEODORE McCANN DAVIS, M.D., 1914
108 Vannoy St.
Greenville, S. C.

JOS. L. DECORMIS, M.D., 1903
Accomac, Va.

HARRY DEIBEL, M.D., 1912
1226 Hanover St.
Baltimore, Md. 21230

WALTER LEE DENNY, JR., M.D., 1914
3908 N. Charles St.
Baltimore, Md. 21218

JAMES ERWIN DIEHL, M.D., 1911
1627 Hanover Ave.
Richmond, Va. 23220

HARRY C. DONAHOO, M.D., 1903
2428 Edgemont Ave.
Chester, Pa.

CHAUNCEY E. DOVELL, M.D., 1914
62 S. Boxwood St., Hampton, Va. 23369

Senior Alumni (Cont.)

MANUEL DUENO Y DUENO, M.D., 1905
571 W. 139th St.
New York 31, N. Y.

CHARLES REID EDWARDS, M.D., 1913
Medical Arts Bldg.
Baltimore, Md. 21201

VERTIE EDW. EDWARDS, M.D., 1913
Box 801
Stokesdale, N. C.

RICHARD ESSLINGER, M.D., 1914
3720 Glenmore Ave.
Baltimore, Md. 21206

FRANK PAUL FIREY, M.D., 1910
2224 N. E. 46th St.
Portland, Ore. 97213

H. M. FOSTER, M.D., 1910
Ilchester Rd.
Ellicott City, Md.

ERNEST WM. FREY, M.D., 1912
1928 Pennsylvania Ave.
Baltimore, Md. 21217

WM. LITTELL FUNKHOUSER, M.D., 1904
15 16th St., N.E.
Atlanta, Ga. 30309

CHARLES WESLEY GARDNER, M.D., 1901
49 Toilsome Hill Rd.
Bridgeport 4, Conn.

W. FRANK GEMMILL, M.D., 1913
121 W. Springettsbury Ave.
York, Pa.

DAWSON ORME GEORGE, M.D., 1912
Denton, Md.

LEO JOHN GOLDBACH, M.D., 1905
6 E. Eager St.
Baltimore, Md. 21202

ALBERT GOLDEY, M.D., 1912
210 W. 101st St.
New York 25, N. Y.

HARRY GOLDSMITH, M.D., 1913
3109 Marnat Rd.
Baltimore, Md. 21208

ARCHIBALD W. GRAHAM, M.D., 1905
Box 563
Chisholm, Minn.

GEO. GARLAND GRAZIER, M.D., 1914
102 River St.
Hollsopple, Pa.

JULIUS E. GROSS, M.D., 1907
9576 Collins Ave.
Surfside, Fla. 33154

EDWARD ST. C. HAMILTON, M.D., 1911
Hamilton Clinic Bldg., Oak Hill, W. Va.

CECIL STARKE HASSELL, M.D., 1914
411 S.W. 29th Ct.
Miami, Fla. 33135

LEONARD HAYS, M.D., 1913
5201 Baltimore Ave.
Hyattsville, Md.

FREDERICK H. HERRMAN, M.D., 1907
1710 E. 33rd St.
Baltimore, Md. 21218

SIMON WICKLINE HILL, M.D., 1909
Regent, N. Dak.

ISADORE HIRSCHMAN, M.D., 1911
618 11th Ave.
Huntington, W. Va.

HENRY HIRAM HODGIN, M.D., 1905
Red Springs, N. C.

MAXEY GREGG HOFFMAN, M.D., 1910
Bunker Hill, W. Va.

HOWARD STEELE HOLLOWAY, M.D., 1903
Perryman, Md.

AARON L. HOLSTEIN, M.D., 1914
174 Undercliff Ave.
Bronx, N. Y. 10452

ABRAHAM L. HORNSTEIN, M.D., 1911
204 E. Biddle St.
Baltimore, Md. 21202

ROBERT EMMETT HOUSTON, M.D., 1904
411 E. Washington St.
Greenville, S. C.

HARRY E. JENKINS, M.D., 1905
202 Fayette St.
Farmville, Va.

KENNETH B. JONES, M.D., 1911
Church Creek, Md.

SOLOMON CHAS. KATZOFF, M.D., 1904
Keystone Realty Co.
907 Whitelock St., 1st Floor Apt.
Baltimore, Md. 21217

CHARLES HUTCHISON KEESOR, M.D., 1911
2302 Chapline St.
Wheeling, W. Va.

CHARLES J. KELLER, M.D., 1898
222 W. Monument St.
Baltimore, Md. 21201

GEORGE S. M. KIEFFER, M.D., 1903
1010 Leeds Ave.
Baltimore, Md. 21229

LAWRENCE B. KOLB, M.D., 1908
6645 32nd St., N.W.
Washington, D. C. 20015

PHILIMON S. LANSDALE, M.D., 1902
100 E. Church St., Frederick, Md.

ALUMNI ASSOCIATION SECTION

Senior Alumni (Cont.)

CHAS. R. LAW, JR., M.D., 1911
103 Broad St.
Berlin, Md.
ERNEST CHAS. LEHNERT, M.D., 1902
9 W. 29th St.
Baltimore, Md. 21218
SIMON GEIDECH LENZNER, M.D., 1912
187 Waterman St.
Providence, R. I. 02906
MORRIS BENJ. LEVIN, M.D., 1914
218 University Pkwy.
Baltimore, Md. 21218
NOLAN D. C. LEWIS, M.D., 1914
Rt. #5
Frederick, Md.
LOUIS HERBERT LIMAURO, M.D., 1906
374 Charles River Rd.
Watertown, Mass.
JOHN ROBERT LOWERY, M.D., 1904
510 W. Innes St.
Salisbury, N. C.
JOHN F. LUTZ, M.D., 1914
72 Southgate Ave.
Annapolis, Md.
CLYDE CLIFTON MACK, M.D., 1904
872 24th St.
Winter Haven, Fla.
ISAAC MICHEL MACKS, M.D., 1911
3506 Liberty Heights Ave.
Baltimore, Md. 21215
CHARLES L. MAGRUDER, M.D., 1914
1010 N. Bundy Dr.
Los Angeles, Calif. 90049
WM. ELI MARTIN, M.D., 1909
Randallstown, Md.
WM. T. MARTIN, M.D., 1913
605 McDaniels Ave.
Greenville, S. C.
FREDERICK L. MCDANIEL, M.D., 1913
44 Northdown Rd.
Alexandria, Va.
ALBERT D. MCFADDEN, M.D., 1914
4313 Marble Hall Rd.
Baltimore, Md. 21218
ROSCOE DRAKE McMILLAN, M.D., 1910
Box 232
Red Springs, N. C.
CHAS. WADE MCPHERSON, M.D., 1910
305 W. Front St., Burlington, N. C.
CHALICE HAYDON METCALFE, M.D., 1914
Sudlersville, Md.

HARRY B. MESSMORE, M.D., 1910
Addison, Pa.
ALFRED MORDECAI, M.D., 1914
806 S. Hawthorne Rd.
Winston-Salem, N. C.
EUGENE H. MULLAN, M.D., 1903
1042 Malaga Ave.
Coral Gables, Fla.
BENJ. NEWHOUSE, M.D., 1912
4213 16th St., N.W.
Washington 11, D. C.
WALTER S. NIBLETT, M.D., 1911
1141 Gypsy Lane, East
Towson, Md. 21204
LESTER D. NORRIS, M.D., 1908
Fairmont General Hospital
Fairmont, W. Va. 26551
JOHN CHARLES O'NEIL, M.D., 1914
P. O. Box 158
Savannah, Ga. 31402
WALTER A. OSTENDORF, M.D., 1913
420 West Elsmere
San Antonio, Texas 78212
JOHN OSTRO, M.D., 1911
5234 Dorchester Ave.
Chicago, Ill. 60615
JAMES B. PARRAMORE, M.D., 1909
4240 West 1st Ave.
Hialeah, Fla.
WILMER MARSHALL PRIEST, M.D., 1909
55 West 184th St.
Bronx 28, N. Y.
WATSON S. RANKIN, M.D., 1901
Methodist Home
Charlotte, N. C. 28205
HARRY CORNELIUS RAYSOR, M.D., 1913
St. Matthews, S. C.
WALTER L. RICHARDS, M.D., 1914
Box 11, Route 4
Charlottesville, Va.
WILLARD J. RIDDICK, M.D., 1905
7426 Dominican St.
New Orleans, La.
HARRY YOUNG RIGHTON, M.D., 1907
401 E. 45th St.
Savannah, Ga. 31405
JOHN WM. ROBERTSON, M.D., 1909
19 North St.
Onancock, Va.
JOSEPH RIGHTON ROBERTSON, M.D., 1910
1700 Johns Rd., Ext.
Augusta, Ga.

Senior Alumni (Cont.)

- LOUIS RUBIN, M.D., 1910
10510 Euclid Ave.
Cleveland, Ohio 44106
- JOHN GUY RUNKEL, M.D., 1910
715 Charing Cross Rd.
Baltimore, Md. 21229
- STANLEY H. RYNKIEWICZ, M.D., 1911
46 Main St.
Kingston, Pa.
- WILLIAM H. SCRUGGS, M.D., 1913
Box 266
Andrews, N. C.
- HARRY R. SEELINGER, M.D., 1910
8920 Semmes Ave.
Norfolk, Va.
- J. D. SHARP, M.D., 1912
Box 849, Shifting Shadows,
Twenty-Nine Palms, Calif.
- DAVID SILBERMAN, M.D., 1912
Riviera Apts., 6E
901 Lake Dr.
Baltimore, Md. 21217
- ALBERT GEO. SINGEWALD, M.D., 1902
1613 E. North Ave.
Baltimore, Md. 21213
- JOHN ANDREW SKLADOWSKY, M.D., 1912
Box 181, Route #1
Severna Park, Md. 21146
- HAMILTON H. SLUSHER, M.D., 1913
Rt. 4, Box 118
Fredericksburg, Va. 22401
- FREDK. SNYDER, M.D., 1908
44 Clinton Ave.
Kingston, N. Y.
- DALLAS C. SPEAS, M.D., 1911
2598 Reynolds Rd.
Winston-Salem, N. C.
- CLARKE JACKSON STALLWORTH, M.D., 1912
Thomaston, Ala.
- GEORGE LEWIS STICKNEY, M.D., 1910
104 West University Pkwy.
Baltimore, Md. 21210
- CHARLES FRANKLIN STROSNIER, M.D., 1909
P. O. Box 245
Goldsboro, N. C.
- B. F. TEFFT, M.D., 1905
185 Washington St.
West Warwick, R. I.
- BERNARD OSCAR THOMAS, M.D., 1906
Professional Bldg.
Frederick, Md.
- HOMER ULRIC TODD, M.D., 1908
2108 St. Paul St.
Baltimore, Md. 21218
- W. HOUSTON TOULSON, M.D., 1913
Medical Arts Bldg.
Baltimore, Md. 21201
- GRAFTON DENT TOWNSHEND, M.D., 1911
1141 Roscomore Rd.
Los Angeles 24, Calif.
- RALPH C. PURNELL TRUIT, M.D., 1910
Great Neck Farm
Stevensville, Md.
- WM. LAWRENCE VAN SANT, M.D., 1910
Hinton Hospital
Hinton, W. Va.
- FREDERICK J. WAAS, M.D., 1905
1804 Mayview Rd.
Jacksonville, Fla. 32210
- ADAM CLARK WALKUP, M.D., 1909
33 Water St.
St. Augustine, Fla.
- WM. SEBASTIAN WALSH, M.D., 1914
24 Greateon Dr.
Providence, R. I. 02906
- WM. BENJ. WARTHEN, M.D., 1905
Davisboro, Ga.
- MYER A. WEINBERG, M.D., 1904
1724 Eutaw Pl.
Baltimore, Md. 21217
- CLEVELAND D. WHELCHER, M.D., 1913
1735 Riverside Dr.
Gainesville, Ga. 30501
- EDWIN WIGNES WHITAKER, M.D., 1912
Box 625
Baton Rouge, La. 70821
- JAVA C. WILKINS, M.D., 1911
Box 446
Haw River, N. C.
- DAVID T. WILLIAMS, M.D., 1914
21 Hall Ave.
Newark, Ohio
- WALTER MICHAEL WINTERS, M.D., 1910
288 Broadway
Paterson, N. J.
- AUSTIN H. WOOD, M.D., 1914
Medical Arts Bldg.
Baltimore, Md. 21201
- EUGENE BASCOM WRIGHT, M.D., 1909
340 Buckhannon Ave.
Clarksburg, W. Va. 26301
- SILAS GREGORY WRIGHT, M.D., 1904
Shawboro, N. C.

Class

NOTES

ELSEWHERE in this edition you will find a "tear out" page, for reporting *Alumni News* to the BULLETIN. This is not an idle gesture.

Your achievements, fellow alumnus, are of interest to your classmates. They constitute a reward to the faculty, are a challenge to the younger physicians, and are an item of prestige for the University. Please cooperate with us by forwarding news of yourself or any alumnus to the BULLETIN. Thank you.

Class of 1920

Dr. William J. B. Orr of 4801 Connecticut Avenue, N.W., Washington, D. C., was a recent contributor to the Alumni Association Student Loan Fund.

Class of 1922

Dr. John A. O'Connor was the recipient of an honorary degree of Doctor of Law, awarded by Loyola College in Baltimore, Md., at a recent convocation.

Class of 1925

Dr. Eva F. Dodge Honored

Dr. Eva F. Dodge, professor of obstetrics and gynecology, emerita, of the University of Arkansas School of Medicine, was honored on June 7, 1964, at commencement exercises. Dr. Dodge is the first woman physician at the University of Arkansas Medical School to be given the honor of professor emerita, only the second professor at the medical school to receive this recognition.

When she graduated from the University of Maryland School of Medicine, her father's alma mater, Dr. Dodge became the fifth woman to be given a rotating

internship and a residency in Obstetrics at the University Hospital in Baltimore. A native of New Hampshire, she had never been further west than Ohio. Dr. Dodge next decided to go to California. After a few months during which she served as an assistant to a private practitioner, she was placed in charge of the semi-private maternity service at the Children's Hospital in San Francisco for a year, then followed a distinguished career in obstetrics and gynecology ending in her nomination as professor of obstetrics and gynecology at the University of Arkansas in 1945. In recognition of her interest in local and national affairs for women, she was chosen Little Rock Woman of the Year in an annual poll conducted by a local newspaper, the *Arkansas Democrat*. Several medical organizations of international scope have claimed Dr. Dodge's time and interest. She has participated in the Medical Woman's International Association for many years and has served in several capacities. In 1947 she was a delegate. In 1961 she was a councillor and also represented the United States in the Medical Woman's International Association scientific program.

Asked recently her plans for retirement, Dr. Dodge said she hoped to continue to do what she could to improve the care of expectant parents with special emphasis on the mental health of parents and children. Mostly, Dr. Dodge looked forward to "doing the things she hasn't done and not the things I have been doing."

In presenting the citation on the occasion of Dr. Dodge's retirement, the chairman of the board of trustees delivered the following resolution:

Resolution

Whereas in accordance with University policy, Professor Eva F. Dodge retires on June 30, 1964, as a member of the faculty

of the University Medical Center, Department of Obstetrics and Gynecology and on that day assumes the rank of Professor Emerita;

Whereas, during her 19 years of service with the University, Dr. Dodge has contributed to the education and development of hundreds of University graduates, many of whom are now serving in the medical profession of this State;

Whereas, Dr. Dodge's teaching duties have carried her outside the walls of the School of Medicine to various parts of the State as she has implemented a program of pre-natal care and in so doing contributed greatly to general health and welfare of the State;

Whereas, Dr. Dodge has been a confidant of students, assisting many with her keen understanding and counsel, particularly women graduates of our School of Medicine;

Whereas, her career has gained both national and international attention in medical circles, all of which reflect great credit on the University;

Now therefore be it resolved that the Board of Trustees of the University of Arkansas express to Dr. Dodge its deep appreciation for her long years of effective service with the University and extend to her sincere good wishes for happiness and continued productive activity throughout her well deserved retirement years.

Class of 1925

Dr. Edgar R. Miller of Wilmington, Del., a Methodist layman and chest surgeon who pioneered in helping to set up the first Christian medical work in Nepal, has been honored by that Asian country. The Methodist physician, who has treated members of Nepal's royal family, was the first foreigner ever to receive a national citation, called *Gorkha Dakstshiva Bahu*.

Class of 1929

Dr. Jacob H. Conn has received the Schneck Award for outstanding contri-

butions by a physician in the field of clinical hypnosis. This award was presented on the occasion of the 16th Annual Meeting of the Society for Clinical and Experimental Hypnosis held in Pittsburgh on October 9, 1964. Dr. Conn has received numerous similar awards in the past. He is the author of a number of treatises on scientific hypnosis in medicine. He is a diplomate in the American Board of Psychiatry in Neurology and a member of the American Board of Child Psychiatry, having been certified in 1959. He is a past president of the National Society for Clinical and Experimental Hypnosis.

Class of 1934

Dr. Louis V. Blum Honored

In recognition for many years of distinguished leadership, dedication and tireless work in behalf of Israel, the Israel Histadrut Campaign of Baltimore has dedicated its newest 34 room Medical Clinic near Tel Aviv to Dr. Louis V. Blum. The Clinic will be known as the Dr. Louis V. Blum Clinic.

At a dinner early in December, Dr. Blum was honored by more than 200 people, the guest speaker being Dr. Albert B. Sabin, the discoverer of oral live-virus polio vaccine. More than 50 physicians formed an honorary committee which organized the dinner. The speakers included the Mayor of the city of Baltimore and Israeli notables.

Dr. H. Lawrence Sutton of 71 Ingraham Boulevard, Hempstead, N. Y., has been elected chairman of the Medical Board of the Meadowbrook Hospital, Hempstead, L. I. This hospital is one of the largest suburban county institutions in the East, being of 600 bed capacity. Dr. Sutton also serves as an attending physician in the psychiatric department of the hospital.

Class of 1935

Dr. Harry M. Robinson, Jr., has announced that the Class of 1935 is now organizing plans for its 30th reunion. Quite a party is anticipated. In a memorandum to the class, Robby states: "As you know, our class has always had a strong representation at its reunions. I am the chairman of the committee and serving with me are Ed Cotter, Ernest Cornbrooks, Joseph Gross and Karl Mech."

Honor Award to Dr. L. K. Woodward

Dr. Lewis K. Woodward, Office of Personnel, Department of State, has received the annual Superior Honor Award of the State Department, presented for exceptional accomplishment, imaginative leadership, and demonstration of high qualities of human understanding in the administration of the "medical" program of the Department of State. The award was presented to Dr. Woodward at special ceremonies on June 11, 1964.

In part, the citation for the award read:

Through his inspired direction of the Foreign Service medical program, Dr. L. K. Woodward, Jr., has sparked a worldwide effort to improve and expand medical care for thousands of Foreign Service employees and their dependents, with a view to preserving their health while serving under difficult and varying circumstances. This accomplishment has contributed in a unique manner to the advancement of United States foreign policy objectives and the fulfillment of key national interests. To accord him deserved recognition for this significant contribution to the public service, it is recommended he receive the Superior Honor Award.

Dr. Woodward was elevated to the post of medical director in January, 1962, after having been assistant medical director since 1956. Through two years of untiring efforts and imaginative leadership, he has

wrought significant changes in the structure, operation and administration of the medical program, thus re-shaping it into a dynamic arm of the personnel system vital to our diplomacy of the 1960's.

Upon assuming direction of the medical program, he supervised a major and far-reaching reorganization. While unified control of policy and procedures was retained in the Department, decision-making authority in many operational matters was decentralized. The decade-old pattern of control at the center was broken as field administrators were given the authority to authorize hospitalization and medical evacuations, to seek outside help in extraordinary situations, to procure medical supplies and equipment, and to approve medical claims. He also decentralized, and at the same time standardized and expedited, the medical examination and medical clearance procedures. Examination standards and policies were re-shaped and the scope of examining services was expanded.

Under his guidance, overseas operations were steadily expanded and strengthened. New health rooms were established, and new medical officers and nurses were recruited to meet the challenge of providing effective health services to 37,000 persons, many serving in underdeveloped areas of the world. He engineered the creation of regional medical programs to ensure the availability of known medical skills to greater numbers of Foreign Service personnel, and he pushed the development of new medical supply sources to provide more rapidly and with greater economy the basic medications and medical supplies essential to a meaningful medical response capability under normal as well as emergency conditions.

Drawing wisely on breakthroughs in medical science, he broadened the scope of the Division's laboratory facility and modernized its techniques. In so doing he enhanced the accuracy and timeliness of the medical examination procedure. Significant indeed were his programming for the adoption of special X-ray techniques, testing procedures for cancer, broadened bio-science and chemistry procedures, and an array of other special testing techniques to meet special circumstances.

Far-reaching health benefits to thousands of persons have resulted from his implementation of a world-wide parasitology program through which reliable diagnosis of intestinal amoebiasis is possible and the effective treatment of these parasites effected. While drawing on medical science to carry out the parasitology program, he also made arrangement to contribute to medical science by making available to current parasitology research the unique statistical data gathered through our program. It is expected that this information will add significantly to knowledge in this specialized field.

Drawing also on new advances in preventive medicine, he has expanded the immunization program against polio-mye-litis through inoculation with Sabin oral-polio vaccine, and against measles through inoculation with live measles vaccine. Similar benefits will accrue to thousands who have obtained active-passive immunity against infectious hepatitis through inoculations with gamma globulin. These latter inoculations are estimated to have avoided a loss of some 40 man years of effort, valued at approximately \$300,000, by reducing by 80% the infectious hepatitis attacks among overseas personnel in 1963.

The Department's medical program today enjoys an excellent reputation within the U. S. Government and in medical circles outside the government. Its stature is in important degree due to Dr. Woodward's enlightened leadership. He is held in high esteem among his colleagues in the Council of Federal Medical Directors for Occupational Health. With them he has steadfastly sought ways to improve the medical facilities and services available to all U. S. Government personnel. His rapport with Department of Defense officials has been instrumental in strengthening the world-wide policy of sharing facilities and services.

While his energies and skills must in large measure be utilized to provide executive direction for the medical program, he has remained a friendly and understanding doctor to hundreds of Foreign Service patients. He has successfully achieved the delicate balance between ac-

cording a patient the privacy that is proper in all personal medical matters, and satisfying the legitimate right of personnel officials to have sufficient information to make meaningful program management decisions. Dr. Woodward has shown exceptionally good judgment and noteworthy perception in identifying medical cases which contain security or diplomatic complications and in devising courses of action which meet in full measure the best interests of all concerned.

His contribution to our government entails these as well as other achievements. In the aggregate they signal a public service of unusual proportions. All of his endeavors have been marked by an exemplary display of maturity, initiative, adroit judgment, and a deep understanding of human strengths and weaknesses. Through this distinguished service he has contributed measurably to the achieving of U. S. foreign policy objectives and earned the gratitude and respect of his colleagues and countrymen. It is fitting that this service be recognized by presenting him with a Superior Honor Award.

Class of 1936

Dr. Joseph G. Zimring of 222 Riverside Boulevard, N. Y., has been named president elect of the Nassau County Medical Society of New York. Dr. Zimring has served as councillor for the Society for a number of years and has also served as the chairman of the Committee of Ethics of the same group. Dr. Zimring, a member of the American Association of General Practice, is director of general practice and secretary of the medical board of the Long Beach Memorial Hospital, Long Beach, N. Y. Dr. Zimring's son, Michael, is a senior premed at the University of Maryland at College Park.

Dr. Theodore E. Woodward, professor of medicine, is now spending a sabbatical year in Pakistan as Director of the Overseas Base of the University of Maryland Institute of International Medicine in Lahore, West Pakistan.

Deaths

B. M. C. 1892

Dr. Dennis M. Desmond of 6 Lee Lane, Pueblo, Colo., died during May, 1963.

P & S 1896

Dr. Joseph F. Swann of 401 S. Ridge Avenue, Kannapolis, N. C., died July 3, 1964. Dr. Swann was 94.

B. M. C. 1897

Dr. Edward B. Evans of 1608 Capitol Avenue, Omaha, Neb., died March 14, 1964, at the age of 89.

Class of 1899

Dr. Charles W. Banner of Greensboro, N. C., died August 30, 1964, at the age of 97.

B. M. C. 1901

Dr. James A. McClung of Richwood, W. Va., died January 7, 1965.

Class of 1902

Dr. Myer Schwartz of 118 Franklin Street, Lawrence, Mass., died recently.

Class of 1904

Dr. James R. Bishop of Colonial Building, Salisbury, Md., died December 24, 1964.

Dr. Bishop, an otolaryngologist, was a native of Selbyville, Del., and a former resident of the Baltimore Hospital for Women. He did postgraduate work at the Roosevelt Hospital in New York from 1920 to 1921; was resident in otolaryngology at the University Hospital from 1925 to 1926 and took further graduate study at Columbia University in 1950.

He was a member and former president of the staff of the Peninsula General Hospital, a member of the Wicomico County Medical Society and the American Medical Association. Dr. Bishop was recognized and presented a pin for 50 years in the continuous practice of medicine in 1957. He was also granted a life membership on the honorary staff of the Peninsula General Hospital and in the American Medical Association. Dr. Bishop was 82.

P & S 1904

Dr. Edward M. Dailey of Dushore, Pa., died on October 5, 1964. Dr. Dailey was 84.

P & S 1905

Dr. Frederick Davis of 86 Bizzell Avenue, Dayton, Ohio, died on December 14, 1964.

Alumni 1905

Dr. Henry C. Houck, West Baltimore physician for more than 57 years and former physician to the Baltimore Police Department, died on December 9, 1964. He was 87.

Following his graduation from the School of Medicine, Dr. Houck opened his office at the corner North Avenue and Appleton Street, closing it only late in 1964 when poor health forced his retirement. He was a Police Department physician from 1920 until 1936.

The son of the late Dr. Henry J. Houck of Baltimore, he is survived only by a daughter, Mrs. Mary E. Staples.

B. M. C. 1905

Dr. Clarence D. Rollins of 1402 Miami Road, South Jacksonville, Fla., died April 11, 1964. Dr. Rollins was 88.

B. M. C. 1906

Dr. G. A. Schneider of Washington

Street, Auburn, Me., died May 11, 1964.
Dr. Schneider was 82.

P & S 1906

Dr. Robert T. Temple of 2981 Ridge Avenue, Dayton, Ohio, died July 15, 1964, at the age of 93.

Class of 1907

Dr. Thomas Henry Legg, for many years a physician in Carroll County and former Mayor of Union Bridge, died November 16 at the Warner Hospital in Gettysburg, Pa. Dr. Legg was 83.

A native of Queen Annes County and the son of the late James R. and Susan T. Legg, Dr. Legg was a 1902 graduate of Western Maryland College and completed his medical education at the University of Maryland after a period at the George Washington University. Shortly after his graduation, he established a practice of general medicine and surgery in Union Bridge following his internship at the University Hospital. During World War II he was a member of the Volunteer Medical Corps. He was a member of the Eastern Shore Society of Maryland and *Alpha Kappa Fraternity*. From 1952 to 1956 he served as Mayor of Union Bridge, Md., and for ten years was a member of the Carroll County Board of Education serving as its president from 1935 to 1939.

B. M. C. 1907

Dr. Jacob Ludwig Mathesheimer of 280 Old Bergen Road, Jersey City, N. J., and of St. Petersburg, Fla., died July 28, 1964, at the age of 79.

P & S 1907

Dr. William J. Schmitz of 118 Midhurst Road, Baltimore, Md., died May 8, 1964, at the age of 81.

B. M. C. 1909

Dr. T. E. Patteson of Dillwyn, Va., died June 6, 1964, at the age of 81.

P & S 1911

Dr. Joseph B. Kilborn of 18 Asylum Street, Hartford, Conn., died May 10, 1964. Dr. Kilborn was 77.

P & S 1913

Dr. William T. May of Patapsco Ave., Baltimore, Md., died October 28, 1964. Dr. May was 73.

P & S 1915

Dr. Elmer B. Staley of 323 East 11th Avenue, Tarentum, Pa., died on November 24, 1964.

Class of 1915

Dr. Oscar Vernon Linhardt of 710 North Bradford Street, Baltimore, Md., died December 10, 1960.

Class of 1915

Col. Charles E. Sima, Medical Corps. U. S. Army (retired), died at his home, 2074 West Belvedere Avenue, in January 1965.

A native of Baltimore and a graduate of the Baltimore City College, Dr. Sima interned at the University Hospital, later enlisting in the Army Medical Corps in 1917. He remained in the regular army until his retirement in 1945 when he engaged in general practice at his home address.

Class of 1915

Dr. Harvey C. Bridgers of Blue Ridge Summit, Pa., died on January 5, 1965, at the Waynesboro Hospital. Dr. Bridgers was 79.

A native of North Carolina and a graduate of the University of Maryland

at College Park, Dr. Bridgers undertook graduate study in otolaryngology following his graduation from the School of Medicine. For a number of years he served as a physician with a Baltimore chemical firm and later established practice in Blue Ridge Summit, Pa. He was a founder of the First National Bank of Blue Ridge Summit and served 42 years as its president. He was a member of *Kappa Psi* medical fraternity and was instrumental in the formation of the Blue Ridge Sportsmen's Association.

Class of 1916

Dr. Edward P. Dunne of Unionville, Conn., died on July 25, 1964, at the age of 76.

Class of 1917

Dr. Elbert Coy Reitzel of 3727 Belle Avenue, Baltimore, Md., died October 23, 1964.

A native of Burlington, N. C., he received his undergraduate education from Roanoke College and his medical degree in 1917 from the University of Maryland. In World War I he served as an Army captain and while on active duty took a residency in psychiatry and neurology at St. Elizabeth's Hospital in Washington. For a year following the war he signed with the U. S. Public Health Service and was assigned to Maryland mental institutions. Later, he joined the U. S. Navy. He served until 1955 with a rank of Captain, during which time he served as psychiatrist on the Board of Veterans Appeals in Washington. Dr. Reitzel was a member of the American Psychiatric Association, the American Medical Association and other professional groups.

Class of 1917

Dr. Leo L. Smith of 229 S.W. 29th Street, Oklahoma City, Okla., died July 11, 1964. Dr. Smith was 71.

Class of 1918

Dr. Morris N. Putterman of 4413 Springdale Avenue, Baltimore, Md., died on August 11, 1964, at the age of 76.

Class of 1922

Dr. Herbert Gordon of 179 Beach 66th Street, Far Rockaway, N. Y., died on August 28, 1964, of cancer. Dr. Gordon was 67.

Alumni 1923

Dr. George A. Knipp, a general practitioner in the western section of Baltimore for more than 40 years, died on October 25, 1964, after a short illness. Dr. Knipp, who was 65, was a member of the staff of the St. Agnes, Bon Secours, Maryland General, Union Memorial, and the Hospital for the Women of Maryland. After a number of years in the western section of Edmondson Avenue, he joined practice with his son, Dr. Harry L. Knipp, with offices at 4116 Edmondson Avenue.

Dr. Knipp was a graduate of the Mount Vernon College and of the School of Medicine. He was a member of the Merchant Marine during World War I. He was a member of a number of medical professional associations.

Class of 1926

Dr. Calvin Hyman, general surgeon and practitioner in Baltimore, died on January 8, 1965, at Sinai Hospital after a short illness. He was 64.

A former resident at the Sinai Hospital, Dr. Hyman was active on the staffs

of the Sinai, Lutheran, Church Home and Franklin Square Hospitals. He was a member of the American College of Surgeons, the Baltimore City Medical Society, the American Proctological Association, the *Phi Lambda Kappa* Medical fraternity and the Charcoal Club. A kindly and sensitive man, Dr. Hyman was appreciative of many of the finer things of life. He is survived by two sons, Robert L. and Nelson Hyman.

Class of 1928

Dr. Creed Collins Greer of 136 Euclid Avenue, Clarksburg, W. Va., died July 16, 1964. Dr. Greer was 63.

Class of 1929

Dr. Benjamin Bardfeld of 1080 E. Landis Avenue, Vineland, N. J., died on August 30, 1964. Dr. Bardfeld was 58.

Class of 1932

Dr. Murray Reckson of 420 Lincoln Road, Miami Beach, Fla., died June 11, 1964. Dr. Reckson was 56.

Dr. Reubin R. Louft died on November 14, 1964, of rheumatic heart disease. He was actively engaged in his medical practice until October 29th when his final illness overtook him.

Class of 1935

Dr. Frank Armento Laino of 1 Seldon Drive, East Northport, N. Y., died in February 1963.

Class of 1939

Melvin Kappelman, 48, died at Sinai Hospital on December 26, 1964, of coronary thrombosis.

Born in Baltimore on December 6, 1916, he attended local schools and received his B.S. in 1935 from the University of Maryland Pharmacy School and

his medical degree at Maryland in 1939.

His internship and residency training in obstetrics and gynecology was completed at Sinai, St. Joseph's, South Baltimore General Hospital and Columbia Hospital for Women in Washington, D. C.

Thereafter he served as a medical officer in the Army during World War II following which he opened his office in Baltimore in his specialty in 1946.

He was a diplomate of the American Board of Obstetrics and Gynecology, a fellow of the American College of Obstetrics and Gynecologists and the International College of Surgeons.

He was particularly interested in radium therapy for gynecological malignancies and studied this problem at the Kelley Clinic (1947) and New York University (1952), and was licensed to practice and use radio-isotopes by the U. S. Government. He founded and was director of the gynecology radium clinic at Sinai Hospital. His staff associations included South Baltimore General Hospital, Lutheran, Franklin Square, Women's and Sinai Hospitals and the Levindale Old Age Home and a member of the board of the Baltimore Planned Parenthood. He was instructor in gynecology and obstetrics at the University of Maryland Medical School from 1945 to 1948.

He married Marian Better on December 1, 1940, and had two sons, Mark and Neil.

BERNARD S. KLEIMAN, M.D.

Class of 1946

Dr. Otto Stevens Matthews of Warsaw, N. C., died on July 27, 1964, at the age of 43. Death was due to neoplastic disease.

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BULLETIN *School of Medicine* *University of Maryland*

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Statistical Evaluation of Medical Information

GEORGE ENTWISLE, M.D., AND WILLIAM A. REINKE, PH.D.

OVER THE last few years, the Department of Preventive Medicine and Rehabilitation has provided consultation in biostatistics for the faculty and students of the Medical School. A variety of seminar courses in biostatistics have also been available. Some "hand-out" material has been made available concerning the statistical techniques discussed in these seminars. It has been found that this material is useful to various students and faculty members who have not participated in the seminars, and so the material has been prepared in a form for wider distribution. This report summarizes the mechanics involved in applying statistical techniques to a variety of situations.

The specific techniques applied will vary with the nature of the problem; at times quantitative measurements will be available, while on other occasions the information will be subjective or qualitative. Sometimes the main objective will be the description of the essential characteristics of the data (mean, standard deviation, percent recovery, etc.). At other times, one may wish to compare current results with previous trials or with established standards. Therefore choice among the following procedures will change from case to case, and must be made with discretion. The philosophy or theory behind each procedure is not discussed since they are covered much more adequately in several texts. Rather the purpose of this report is to provide convenient summaries of the mechanics involved in the application of the several techniques. For amplification, the following texts are recommended:

1. **Principles in Medical Statistics**, 7th Ed., by A. Bradford Hill. 1961. Oxford University Press, New York.
2. **Biostatistics** by A. Goldstein. 1964. Macmillan Co., New York.
3. **Introduction to Statistical Analysis**, 2nd Ed., by W. J. Dixon and F. J. Massy, Jr. 1957. McGraw Hill Book Co., New York.
4. **Statistical Methods**, 5th Ed., by G. W. Snedecor. 1957. The Iowa State University Press.

I. TERMS USED

x	any one observation
Σ	sum of
A	arithmetic mean (sometimes denoted \bar{x})
n	number of observations
p	proportion of observations with one particular characteristic
d	difference

II. DESCRIPTIVE MEASURES

A. Measures of the central point of a group of observations.

1. The arithmetic mean or average (A)

a. Sum the observations (Σx)

b. Divide by the number of observations ($A = \frac{\Sigma x}{n}$)

2. The median (Med) is the middle value in a set of data arranged in order of magnitude.

B. Measures of variability in a group of observations.

1. The range (R) is the difference between the maximum and minimum values.

2. The variance (V) is the mean of squared deviations from the arithmetic mean.

3. The standard deviation (S) is the square root of the variance.

a. Square each value and add these (Σx^2)

b. Obtain a total of individual values, square this total, and divide by the number of observations ($[\Sigma x]^2/n$)

c. Subtract the result of Step b from that of Step a to obtain a "sum of squares" ($SQ = \Sigma x^2 - [\Sigma x]^2/n$)

d. Divide the sum of squares by one less than the number of observations to obtain the variance $V = \frac{SQ}{n-1}$

e. Compute the square root of the variance ($S = \sqrt{V}$).

III. MEASUREMENTS USED AS TESTS OF SIGNIFICANCE

A test of significance is a rule for deciding which of the following two conclusions should be drawn from the results of an experiment:

Conclusion 1:

There is a real difference between two independent groups of observations. In the language of the statistician, this is stated: "the difference is statistically significant."

Conclusion 2:

The results are indecisive—i.e., the data do not warrant the conclusion that there is a real difference between two independent groups of observations. In the language of the statistician: "The difference is not statistically significant." Note that Conclusion 2 does not say that there is no difference. It only says that there *may be* a difference, but if so the present data are insufficient to show it.

IV. THE STANDARD ERROR OF THE MEAN OR AVERAGE (SA)

A. Calculate the standard deviation (S) according to the rule of Section II B. 3.

B. Divide S by the square root of the number of observations ($SA = S/\sqrt{n}$)

Note: If the distribution of measurements is approximately normal, about $\frac{2}{3}$ of the individual values should fall within one standard deviation of the mean. Values which deviate from the mean by more than 2 S should occur in about one case out of 22. Deviations of more than 3 S can be expected only about 3 times in 1000. If these conditions are not satisfied, the arithmetic may be faulty or the data may be polluted by a few observations made under exceptional circumstances.

V. THE STANDARD ERROR OF MATCHED DIFFERENCES (SMD)

- A. Record paired observations in two columns—i.e., “before” and “after”.
- B. In a third column record differences (d) observed in each pair with due regard for sign. The “d” values are treated just like “x” values in the computation of a variance below.
- C. Square each difference and add these (Σd^2).
- D. Obtain a total of differences, square this total, and divide by the number of matched pairs ($[\Sigma d]^2/n$).
- E. Subtract result D from result C to obtain a sum of squared differences ($SQD = \Sigma d^2 - [\Sigma d]^2/n$).
- F. Divide SQD by one less than the number of pairs in order to obtain the variance of differences ($VD = \frac{SQD}{n-1}$)
- G. Divide result F by the number of pairs and take the square root of the answer ($SMD = \sqrt{\frac{VD}{n}}$)

VI. THE STANDARD ERROR OF A PERCENTAGE (SP)

- A. Multiply the proportion of observations having a specific characteristic by the proportion that do not have it and divide by the total number of observations ($\frac{p[1-p]}{n}$).
- B. Find the square root of the result ($SP = \sqrt{\frac{p[1-p]}{n}}$).

VII. THE STANDARD ERROR OF AVERAGE DIFFERENCES (SAD)

- A. Compute the sum of squares for the first set of data ($SQ_1 = \Sigma x_1^2 - [\Sigma x_1]^2/n_1$).
- B. Compute the sum of squares for the second set of data ($SQ_2 = \Sigma x_2^2 - [\Sigma x_2]^2/n_2$).
- C. Obtain a pooled variance by adding results A and B and dividing by two less than the total number of observations ($V = \frac{SQ_1 + SQ_2}{n_1 + n_2 - 2}$).
- D. Divide V by the number of observations in the first set of data (V/n_1).
- E. Divide V by the number of observations in the second set of data (V/n_2).
- F. Add results D and E ($\frac{V}{n_1} + \frac{V}{n_2}$).
- G. Obtain the square root of result F ($SAD = \sqrt{\frac{V}{n_1} + \frac{V}{n_2}}$).

VIII. THE STANDARD ERROR OF PERCENTAGE DIFFERENCES (SPD)

- A. Compute the proportion (p) of observations having a specific characteristic in the data as a whole.
- B. Obtain the product p (1 - p).
- C. Divide result B by the number of observations in the first set of data ($\frac{p[1-p]}{n_1}$).

- D. Divide result B by the number of observations in the second set of data $\left(\frac{p[1 - p]}{n_2}\right)$.
- E. Add results C and D $\left(\frac{p[1 - p]}{n_1} + \frac{p[1 - p]}{n_2}\right)$.
- F. Obtain the square root of result E $\left(\text{SPD} = \sqrt{\frac{p[1 - p]}{n_1} + \frac{p[1 - p]}{n_2}}\right)$.

IX. TESTS OF SIGNIFICANT DIFFERENCES—"t" TEST

A. Between averages—unmatched data.

1. Compute the average of the first set of data $\left(A_1 = \frac{\sum x_1}{n_1}\right)$.
2. Compute the average of the second set of data $\left(A_2 = \frac{\sum x_2}{n_2}\right)$.
3. Compute the standard error of average differences (SAD) according to the procedure of section VII.
4. Compute "t" as the difference between averages divided by the standard error $\left(t = \frac{A_1 - A_2}{\text{SAD}}\right)$.
5. The critical value of "t" with $n_1 + n_2 - 2$ degrees of freedom is listed in a standard "t" table such as Table 1.

B. Between averages—matched data.

1. Record paired observations as indicated in Section V.
2. Compute the average difference $\left(\text{AD} = \frac{\sum d}{n}\right)$.
3. Compute the standard error of matched differences (SMD) as shown in Section V.
4. Divide the average difference by the standard error to obtain "t" $\left(t = \frac{\text{AD}}{\text{SMD}}\right)$.
5. The critical value of "t" with $n - 1$ degrees of freedom is listed in a standard "t" table such as Table 1.

C. Between percentages.

1. From the first set of data compute the proportion of observations having the specific characteristic of interest (p_1).
2. From the second set of data compute the proportion of observations having the specific characteristic of interest (p_2).
3. Compute the standard error of percentage differences (SPD) according to the method of Section VIII.
4. Compute "t" as the difference between percentages divided by the standard error $\left(t = \frac{p_1 - p_2}{\text{SPD}}\right)$.
5. The critical value of "t" with ∞ degrees of freedom is listed in a standard "t" table such as Table 1.

X. CHI-SQUARE TEST (χ^2)

The Chi-square test is used to compare the observed frequency of occurrence and non-occurrence of a given event (recovery from a disease, for example) with the

frequencies expenced on hypothetical grounds. The comparisons are made with respect to several classifications of interest (age groups, for example). To compute χ^2 , take the sum of the ratios of squared deviations between observed and expected frequencies divided by expected frequencies.

A. Testing a known hypothesis.

1. Square the difference between the actual and expected frequency of occurrence in the first category and divide by the expected frequency $([a - e]^2/e)$.
2. Repeat step 1 for the other categories and add the results
$$\left(\chi^2 = \sum \frac{(a - e)^2}{e}\right).$$
3. A standard table of χ^2 , such as Table 2, can be used to find the critical value of χ^2 with degrees of freedom equal to 1 less than the number of categories.

B. Comparing two treatments.

1. The expected frequency for the first category (column) of the first treatment (row) is obtained by multiplying the total number of observations in the first column by the total in the first row and dividing by the total number of observations in the entire table $\left(e_{11} = \frac{c_1 r_1}{n}\right)$.
2. The contribution to χ^2 from the first row and first column is the squared difference between the observed result and the expected from Step 1 divided by the expected $\left(\frac{[a_{11} - e_{11}]^2}{e_{11}}\right)$.
3. Similar computations are made for other cells of the table and added to obtain $\chi^2 \left(\chi^2 = \sum \frac{[a_{ij} - e_{ij}]^2}{e_{ij}}\right)$.
4. A standard table of χ^2 , such as Table 2, can be used to find the critical value of χ^2 with degrees of freedom equal to one less than the number of rows times one less than the number of columns.

Precautions to be borne in mind when using the χ^2 test. The χ^2 test should be calculated from observed and expected numbers, not percentages. In a 2 x 2 table, use Fisher's exact method or Mainland's tables if the smallest expected number is less than 5. When "before-after" measurements are made, χ^2 is calculated on only those observations which change.

XI. THE ANALYSIS OF VARIANCE—"F" TEST

The comparison of group averages (see Section IX A) by means of the "t" test is applicable only when there are just two groups. Comparisons involving more than two groups employ the "F" test as described below.

The number of groups is designated by g; the number of individuals, or samples, per group is s.

A. If the groups are all of the same size.

1. Square each observation and add the squares ($CS_1 = \sum x^2$).
2. Obtain a sub-total (ST) for each group.

3. Square the sub-totals, add the squares, and divide by the number of observations in each group $\left(CS_2 = \frac{\sum ST^2}{s} \right)$.
4. Compute the grand total (GT) of all observations.
5. Square the grand total and divide by the total number of observations $\left(CS_3 = \frac{GT^2}{sg} \right)$.
6. Construct a table as follows:

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	$SSB = CS_2 - CS_3$	$g - 1$	$MSB = \frac{SSB}{g - 1}$	$F = \frac{MSB}{MSW}$
Within Groups	$SSW = CS_1 - CS_2$	$g(s - 1)$	$MSW = \frac{SSW}{g(s - 1)}$	

7. A standard table of F can be used to find the critical value of F with appropriate degrees of freedom ($[g - 1]$ and $g[s - 1]$).
- B. If the groups are of unequal size.
1. — 2. As before.
 3. As before except each ST^2 must be divided by its own s before adding.
 4. — 7. As before, recalling that s varies from group to group.

Note: The table of F values gives the chances of obtaining as large, or larger value than those tabulated if all the groups are representing a single population. If the value is significant, the conclusion is that the groups are probably not from a single population, but this does not tell which or how many of the groups belong to one population or another. There is no way of distinguishing the individual groups, except as the group averages indicate this.

XII. LINEAR REGRESSION

This technique serves to associate changes in level of a dependent variable (height, for example) with changes in an independent variable (such as age). The former is usually denoted by y , the latter by x . The problem is to find values of coefficients A and B that will yield a meaningful predictive equation $y = A + Bx$.

- A. Tabulate columns of x and corresponding y values.
- B. Compute the total of the x values ($\sum x$).
- C. Compute the total of the y values ($\sum y$).
- D. Compute the product of each pair of x and y values and sum these products ($\sum xy$).
- E. Square each x value and sum the squares ($\sum x^2$).
- F. Compute

$$B = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

- G. Compute

$$A = \frac{\sum y - B\sum x}{n}$$

XIII. CORRELATION — r

Where a mutual relationship exists between two variables, the correlation coefficient is used to express the degree of relationship. The correlation coefficient, r , may vary from $+1$ (perfect correlation) to 0 (no correlation) to -1 (perfect inverse correlation).

- A. Tabulate x and y and compute Σx , Σy , Σxy , and Σx^2 as in Section XII.
- B. Square each y value and sum these squares (Σy^2).
- C. Compute

$$r = \frac{n\Sigma xy - \Sigma x\Sigma y}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}}$$

- D. Compute

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

- E. The significance of r may be tested against critical values of " t " based upon $n - 2$ degrees of freedom.

Note: The square of the correlation coefficient, r^2 , measures the proportion of the variance in one set of observations that is attributable to the variability in the other set. For instance, if men's heights and weights correlate with $r = 0.5$, then 25% ($.5 \times .5$) of the variance in weight is associated with the variance in height. Notice that $0.4^2 = 0.16$, $0.3^2 = 0.09$, and in general small values of r , when squared, signify very little association.

XIV. NON-PARAMETRIC TESTS

If one wishes to make a quick analysis with a minimum of calculation, one of the following non-parametric tests may serve the purpose. Such tests are also useful when no assumptions can be made regarding the form of the distribution of the data.

- A. Sign Test for analysis of paired measurements.
 1. Count the number of occasions on which the second of a pair of measurements exceeded the first.
 2. Count the number of occasions on which the first measurement exceeded the second.
 3. Determine whether the larger of the two counts exceeds the critical number listed in Table 3.
- B. Test of Runs.
 1. Arrange the "before" and "after" readings into a single array by order of magnitude.
 2. Count the number of runs. (A run consists of one or more value(s) from the same set (before or after) which appear(s) together in the array.)
 3. Determine whether the number of runs observed is less than the critical number listed in Table 4. [If there were no pronounced differences between the "before" and "after" readings, values from the two groups would be intermingled; short runs from one group would tend to be followed by short runs from the other, producing many runs in all. On the contrary, a substantial difference in level between the two groups would cause a clustering of "before" results at one end of the array and a similar clustering of "after" measurements at the other end, i.e., there would be a few long runs].

C. Test of Rank-Sums

1. Form an array of "before" and "after" results in order of magnitude.
2. Assign ranks to each result. [In case of a tie between two results for, say, ranks 3 and 4, each is assigned rank 3.5].
3. Sum the rank values for the group (before or after) which tends to be lower in rank.
4. Check the sum obtained against the critical total recorded in Table 5.

D. Rank Correlation Test.

1. Rank the observations in the first group.
2. Rank the observations in the second group.
3. Square the differences in rank for each pair of observations and sum the squares (Σd^2).
4. Compute

$$R = 1 - \frac{6\Sigma d^2}{n(n^2 - 1)},$$

where n is the number of pairs of observations.

5. Compare the computed R with the critical value listed in Table 6 as a basis for analyzing comparability of the two sets of ranks.

Appendix—Examples

II. DESCRIPTIVE MEASURES

Illustrative data.

x	x^2
2	4
3	9
6	36
10	100
14	196
<hr/> 35	<hr/> 345

II. 1 $A = \frac{\Sigma x}{n} = \frac{35}{5} = 7$

II. 2 Med = 6

II. 3 $R = 14 - 2 = 12$

II. 4 $V = \frac{\Sigma x^2 - (\Sigma x)^2/n}{n - 1} = \frac{345 - (35)^2/5}{4} = 25$

II. 5 $S = \sqrt{V} = 5$

IV. THE STANDARD ERROR OF THE MEAN OR AVERAGE (SA)

Compute the standard error of the mean for the data of Example II.

$$SA = \frac{s}{\sqrt{n}} = \frac{5}{\sqrt{5}} = 2.2$$

V. THE STANDARD ERROR OF MATCHED DIFFERENCES (SMD)

Compute the standard error of the differences between the following measurements obtained before and after the application of a certain stimulus.

Before	After	Difference (d)	d ²
10	15	+5	25
12	15	+3	9
15	17	+2	4
9	14	+5	25
20	17	-3	9
14	15	+1	1
20	22	+2	4
18	19	+1	1
13	10	-3	9
15	17	+2	4
		+15	91

$$SQD = \Sigma d^2 - \frac{(\Sigma d)^2}{n} = 91 - \frac{(15)^2}{10} = 68.5$$

$$VD = \frac{SQD}{n-1} = \frac{68.5}{9} = 7.61$$

$$SMD = \sqrt{\frac{VD}{n}} = \sqrt{\frac{7.61}{10}} = 0.87$$

VI. THE STANDARD ERROR OF A PERCENTAGE (SP)

Of 25 animals in a given test, 5 died. What is the standard error of the death rate?

$$SP = \sqrt{\frac{p(1-p)}{n}} = \sqrt{\frac{(.2)(.8)}{25}} = .08$$

VII. THE STANDARD ERROR OF AVERAGE DIFFERENCES (SAD)

Compute SAD from the following:

x ₁	x ₁ ²	x ₂	x ₂ ²
2	4	11	121
3	9	18	324
6	36	19	361
10	100		
14	196		
35	345	48	806

$$SQ_1 = \Sigma x_1^2 - (\Sigma x_1)^2/n_1 = 345 - (35)^2/5 = 100$$

$$SQ_2 = \Sigma x_2^2 - (\Sigma x_2)^2/n_2 = 806 - \frac{(48)^2}{3} = 38$$

$$V = \frac{SQ_1 + SQ_2}{n_1 + n_2 - 2} = \frac{138}{6} = 23$$

$$SAD = \sqrt{\frac{V}{n_1} + \frac{V}{n_2}} = \sqrt{\frac{23}{5} + \frac{23}{3}} = 3.5$$

VIII. THE STANDARD ERROR OF PERCENTAGE DIFFERENCES (SPD)

Five of 25 animals in one test died, while 20 of 75 died in another test. Compute SPD.

$$p = \frac{5}{25} + \frac{20}{75} = 0.25$$

$$SPD = \sqrt{\frac{p(1-p)}{n_1} + \frac{p(1-p)}{n_2}} = \sqrt{\frac{(.25)(.75)}{25} + \frac{(.25)(.75)}{75}} = 0.10$$

IX. TESTS OF SIGNIFICANT DIFFERENCES—"t" TEST

IX. 1. Do the averages of Example VII differ significantly?

$$A_1 = \frac{\Sigma x_1}{n_1} = \frac{35}{5} = 7$$

$$A_2 = \frac{\Sigma x_2}{n_2} = \frac{48}{3} = 16$$

$$t = \frac{A_1 - A_2}{\text{SAD}} = \frac{7 - 16}{3.5} = -2.57 < -2.45 \text{ (the critical value of "t" with } P = 0.05 \text{ and 6 degrees of freedom). The observed difference is, therefore, significant.}$$

IX. 2. Is the average difference of Example V significant?

$$AD = \frac{\Sigma d}{n} = \frac{15}{10} = 1.5$$

$$t = \frac{AD}{\text{SMD}} = \frac{1.5}{0.87} = 1.72 < 2.26 \text{ (the critical value of "t" with } P = 0.05 \text{ and 9 degrees of freedom). Thus the difference is not significant.}$$

IX. 3. Did the two tests of Example VIII yield significantly different results?

$$p_1 = \frac{5}{25} = 0.20$$

$$p_2 = \frac{20}{75} = 0.27$$

$$t = \frac{p_1 - p_2}{\text{SPD}} = \frac{0.20 - 0.27}{0.10} = -0.70 > -1.96 \text{ (the critical value of "t" with } P = 0.05 \text{ and } \infty \text{ degrees of freedom). We cannot conclude that the results of the two tests are dissimilar.}$$

X. CHI-SQUARE TEST (χ^2)

X. 1. Is the following distribution incompatible with the hypothesis that a certain condition occurs with equal frequency in the two sexes?

	MALE	FEMALE	
Cases	610	390	

$$\chi^2 = \sum \frac{(a - e)^2}{e} = \frac{(610 - 500)^2}{500} + \frac{(390 - 500)^2}{500} = 48.4 > 3.84 \text{ (the critical value of } \chi^2 \text{ with } P = 0.05 \text{ and 1 degree of freedom). As a result, we conclude that there are significantly more males than females with the condition of concern.}$$

X. 2. Do the following results indicate that the treated group performed any differently from the control group?

Actual Results

	Complete Recovery	Temporary Recovery	Improvement	Non-recovery	
Treated	46	56	54	44	200
Control	14	25	36	25	100
	60	81	90	69	300

Expected Results ($e_{ij} = \frac{r_i c_j}{n}$)

$\frac{(200)(60)}{300} = 40$	$\frac{(200)(81)}{300} = 54$	$\frac{(200)(90)}{300} = 60$	$\frac{(200)(69)}{300} = 46$
$\frac{(100)(60)}{300} = 20$	$\frac{(100)(81)}{300} = 27$	$\frac{(100)(90)}{300} = 30$	$\frac{(100)(69)}{300} = 23$

$\chi^2 = \sum \frac{(a_{ij} - e_{ij})^2}{e_{ij}} = \frac{(46 - 40)^2}{40} + \frac{(56 - 54)^2}{54} + \dots + \frac{(25 - 23)^2}{23} = 4.98 < 7.82$
(the critical value of χ^2 with $P = 0.05$ and 3 degrees of freedom). Hence the effect of treatment is inconclusive.

XI. THE ANALYSIS OF VARIANCE—"F" TEST

Given information on the following groups of data, is there evidence that the group averages differ significantly.

	Group 1	Group 2	Group 3	Group 4
	4	2	7	6
	2	4	7	5
	3	4	6	4
ST	9	10	20	15
GT = 54				

$CS_1 = \Sigma x^2 = 4^2 + 2^2 + \dots + 4^2 = 276$

$CS_2 = \frac{\Sigma ST^2}{s} = \frac{9^2 + 10^2 + 20^2 + 15^2}{3} = 268.67$

$GS_3 = \frac{GT^2}{gs} = \frac{54^2}{(4)(3)} = 243$

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F
Between Groups	$268.67 - 243 = 25.67$	$4 - 1 = 3$	$\frac{25.67}{3} = 8.56$	$\frac{8.56}{0.92} = 9.30$
Within Groups	$276 - 268.67 = 7.33$	$4(3 - 1) = 8$	$\frac{7.33}{8} = 0.92$	

Since 9.30 exceeds 4.07 (the critical value of F with $P = 0.05$ and 3 and 8 degrees of freedom), we conclude that the group averages are dissimilar.

XII. LINEAR REGRESSION

Find the regression equation that best fits the following data.

x	y	xy	x ²
4	10	40	16
2	6	12	4
0	2	0	0
3	6	18	9
2	4	8	4
11	28	78	33

$$B = \frac{n\Sigma xy - \Sigma x\Sigma y}{n\Sigma x^2 - (\Sigma x)^2} = \frac{(5)(78) - (11)(28)}{(5)(33) - (11)^2} = 1.86$$

$$A = \frac{\Sigma y - B\Sigma x}{n} = \frac{28 - (1.86)(11)}{5} = 1.51$$

$$\hat{Y} = A + Bx = 1.51 + 1.86x$$

Thus when $x = 2$ the predicted value of y becomes $\hat{y}_2 = 1.51 + (1.86)(2) = 5.23$.

By comparison the observed values of y_2 encountered in the data are 6 and 4.

XIII. CORRELATION — r

Is a genuine association between x and y revealed by the data of Example XII?

x	y	xy	x^2	y^2
				100
				36
				4
				36
				16
11	28	78	33	192

$$r = \frac{N\Sigma xy - \Sigma x\Sigma y}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}} = \frac{(5)(78) - (11)(28)}{\sqrt{[(5)(33) - (11)^2][(5)(192) - (28)^2]}} = 0.93$$

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0.93\sqrt{3}}{\sqrt{.1317}} = 4.44 < 5.54 \text{ (the critical value of "t" with } P = 0.05 \text{ and 3}$$

degrees of freedom). We recognize that in such a limited amount of data this strong an association is quite likely to occur by chance, even if the true association is 0. An association therefore remains unconfirmed.

XIV. NON-PARAMETRIC TESTS

XIV. 1. Is a significant difference between the "before" and "after" results of Example V substantiated by the sign test?

Number +	8
Number -	2
	10

According to Table 3, significance requires 9 out of 10 of the second readings to differ in the same direction relative to the first; hence the sign test is inconclusive here. Note that the non-parametric test tends to be relatively insensitive in detecting differences.

XIV. 2. What does the test of runs show with respect to the following array of 24 numbers (12 pairs)?

Time	Result	Time	Result	Time	Result
Before	43	Before	61	After	79
Before	49	Before	62	Before	81
After	50	After	64	Before	84
Before	52	Before	67	After	89
Before	57	Before	67	After	93
Before	57	After	70	After	95
After	58	After	71	After	102
After	59	Before	72	After	110

The first two numbers are from the "before" group and represent one run; the third number forms the second run; etc. In all there are 12 runs, considerably more than the critical maximum of 8 listed in Table 4 for 12 pairs. The test thus fails to reveal a significant difference between results "before" and "after".

XIV. 3. Does the rank-sum test produce statistically significant results from the data of Example XIV. 2?

Assigning a rank of 1 to the lowest value, 43, a rank of 2 to the value 49, etc. we note that the "before" ranks tend to be lower. We therefore sum them as follows:

Sum = $1 + 2 + 4 + 5.5 + 5.5 + \dots + 19 = 115 < 122$ (the critical maximum of Table 5 with $P = 0.05$ and 12 pairs). Our conclusion is that the small sum has resulted from a significant clustering of "before" values toward the low end of the array. This in turn leads us to decide that the "after" results are significantly higher than the "before". Note that while the rank-sum test involves more computation than the test of runs, it tends to be more capable of detecting differences between the two sets of data.

XIV. 4. Eight patients have been ranked as follows according to mental attitude and improvement in physical condition. Is there an association between these factors?

Patient	Mental	Physical	d	d ²
A	2	3	-1	1
B	1	4	-3	9
C	8	8	0	0
D	4	2	2	4
E	5	5	0	0
F	3	1	2	4
G	7	6	1	1
H	6	7	-1	1
				<hr/> 20

$R = 1 - \frac{6\sum d^2}{n(n^2 - 1)} = 1 - \frac{(6)(20)}{(8)(63)} = 0.76 < 0.73$ (the critical value of R from Table 6 with $P = 0.05$ and 8 pairs). We conclude that there is an association between mental attitude and physical improvement in these patients.

CONCLUSION

A variety of techniques used in the statistical evaluation of medical information has been reviewed and examples given on the use of these techniques. In order to conserve space, no statistical tables are included. Statistical tables on the probabilities of (t), table of Chi-square, and critical values of the sign test can be found in one or more of the references given in the introduction.

Spontaneous Posterior Fossa Hematoma— Unusual Complication of Hodgkin's Disease

PAUL D. MEYER, M.D.,* JOHN A. WAGNER, M.D., and JAMES G. ARNOLD, JR., M.D.

DESPITE AN INCREASING awareness of posterior fossa subdural hematomas, these lesions remain a relative rarity in the literature. The first recorded case was by Picken.¹³ Since then, 18 additional cases have been documented. This report describes the first case of a spontaneous posterior fossa subdural hemorrhage secondary to a bleeding diathesis in a patient with Hodgkin's disease.

Clinical Summary

A 26-year-old white male complained initially of severe nonradiating lumbar pain which began in September, 1964. A few days later he developed a fever accompanied by shaking chills, with radiation of the back pain to both testes. At a local hospital it was thought he suffered a lower urinary tract infection and appropriate antibiotic therapy was begun. The fever persisted and further studies of the urinary tract including intravenous pyelography and cystoscopy revealed bilateral hydroureters with normal calyceal systems. Three days after admission, small, nontender, left supraclavicular and axillary nodes were noted. Splenic enlargement was documented for the first time. During the ensuing 3 weeks the axillary nodes enlarged, and hilar adenopathy with bilateral basilar infiltrates was demonstrated roentgenographically. Biopsy of several lymph nodes was performed and interpreted as showing only nonspecific inflammatory changes. Despite the inconclusive pathologic reports, a diagnosis of a lymphoma was made and he was given a course of nitrogen mustard therapy. This resulted in dramatic improvement of the lymphadenopathy and pulmonary infiltrates, with a return of temperature to normal. The only untoward reactions to therapy were a decline in hemoglobin from 14.3 Gm. to 8.8 Gm. and a decrease in blood leucocytes from 14,000 to 3,000 per cubic millimeter. He was transfused with fresh whole blood and discharged as improved.

He remained asymptomatic for 2 weeks and then had an exacerbation of the adenopathy, fever, and severe abdominal pain. He was admitted to University Hospital and given a second course of nitrogen mustards with a good therapeutic response. Throughout his entire hospitalization all laboratory tests including the platelet count were within normal limits.

Approximately 1 week after this second admission, he again developed a spiking temperature with severe chest and back pain. Antibiotics were administered but without effect. On November 6 he was readmitted to University Hospital. Physical examination revealed a chronically ill, pale patient whose pulse was 160 per minute and whose respirations were rapid and shallow. The abdomen was diffusely tender, and there was marked hepato-splenomegaly. The blood hemoglobin was 10.3 Gm., and the blood leucocytes numbered 12,900 per cubic millimeter. An examination of the bone marrow was reported as normal. Two days prior to death, while elevated temperature and flank pain persisted, he developed marked nausea and vomiting. Cytocen and steroids were given only with moderate relief. Early in the morning of the third hospital day, he complained of severe headaches and rapidly lapsed into a comatose state. Neurological examination at this time revealed nonreactive equal pupils, areflexia and no response to painful stimuli. Two hours prior to death respirations became very irregular and grunting in type, and numerous petechiae appeared over the thorax and abdomen. He expired three and one-half hours after the onset of the headache.

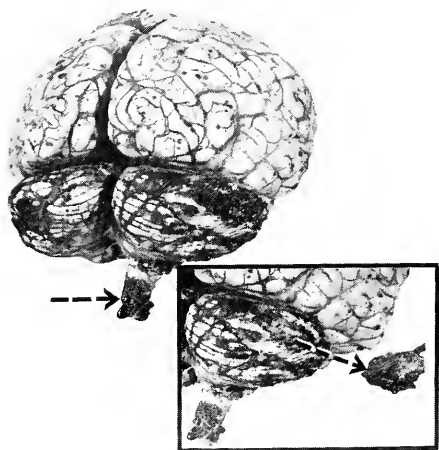
Autopsy Findings

The general autopsy revealed marked enlargement of the tracheobronchial, periaortic, and mesenteric lymph nodes, liver, spleen, kidneys, and lungs attributed to the lymphoma. Petechiae were prominent over the thorax, abdomen, visceral and parietal pleural surfaces, while submucosal hemorrhages were seen in the right renal pelvis and urinary bladder. Microscopic examination of representative lymph nodes and all other organs were interpreted as diagnostic of Hodgkin's granuloma.

The brain weighed 1470 Gms. Numerous petechial hemorrhages were scattered over the

From the Department of Neurosurgery and Division of Neuropathology, University of Maryland, School of Medicine, Baltimore, Maryland, 21201.

* Resident in Neurosurgery.



convexities and bases of both cerebral hemispheres. On entering the posterior fossa, a large amount of unclotted blood and large clots were encountered between the arachnoid and the dura. Abundant subarachnoid hemorrhage was present over the superior and lateral aspects of the cerebellum. The extreme lateral tip of the right cerebellar hemisphere was adherent to the dura along with a large clot. Extensive subarachnoid hemorrhage and subdural clots were present over the dorsal surface of the brain stem and between the cerebellar hemisphere (Fig. 1).

Microscopically the petechia were found to be discrete foci of hemorrhage, the centers of which contained numerous white blood cells, reticulum cells and "Dorothy Reed" cells. The separate lateral wedge of cerebellum showed both gross and microscopic areas of hemorrhage which contained tumor cell infiltrates. Careful examination of this section was carried out on the chance that it might contain an arterio-venous malformation, but none was demonstrated. A section through the low medulla revealed clotted blood firmly adherent to both sides of the arachnoid.

Discussion

A. Etiology

Subdural hematomas of the posterior fossa may be either traumatic^{4, 5, 11-13, 15} or spontaneous in origin. The vast majority of those reported are traumatic with the usual site of bleeding being the transverse sinus. Among the 18 documented cases to date, there were 14 cases that revealed either historical or autopsy evidence

of occipital trauma. The cause of bleeding in 2 cases was not clearly established. In the remaining 2 cases, the hemorrhage was spontaneous and secondary to rupture of the posterior inferior cerebellar artery³ and rupture of a vertebral artery aneurysm.¹⁶ The present case is unique since the lesion was due to a spontaneous hemorrhage secondary to Hodgkin's disease. From 2.5 to 20%^{9, 17} of patients with lymphomas or leukemias have a major intracranial hemorrhage during the terminal phase of their disease. Williams *et al.*,¹⁸ in their monograph on the neurological complications of lymphomas and leukemias, found that but 146 out of 5778 patients or 2.5% suffered from massive hemorrhages. Of these, 70% of the hemorrhages were intracerebral, 12% subdural or subarachnoid and the remainder a combination of both. If only the patients with lymphomas or lymphosarcomas from this series are analyzed, the incidence of intracranial hemorrhage is less than one-half per cent.

B. Clinical Aspects

The clinical manifestations of subdural hematomas are protean and well known.^{2, 7, 10, 11, 14} A posterior fossa subdural hematoma, however, frequently presents additional signs and symptoms which should direct one's attention to the sub-tentorial compartment. Table 1 summarizes the major clinical findings in all cases analyzed to date.

Clinically, it is almost impossible to differentiate a posterior fossa subdural hemorrhage from one that is epidural in location. However, when faced with a patient with a clear-cut history of occipital trauma, progressive headache, a declining sensorium, nuchal rigidity, with or without multiple cranial nerve signs, one's index of suspicion for an expanding hemorrhagic lesion of the posterior fossa should be high indeed.

Table I. Summary of Major Clinical Findings in 19 Cases of Posterior Fossa Subdural Hematoma. (After Estridge and Smith.)⁵

Age Incidence.....	Birth to 64 years ^{1,4,8,12,13}
Headache.....	All cases
Depressed Sensorium.....	All cases
Duration of time from injury to onset of symptoms.....	≈ 2 hours to 3 months. ^{1,8,10,13} Average—less than 10 days
Evidence of increased intracranial pressure.....	All cases
Nuchal rigidity.....	7
Nystagmus.....	5
Hypotonia.....	3
Hyperactive reflexes.....	More frequent than hypoactive
Sixth nerve palsy.....	1 ⁶
Facial palsy.....	3
Incoordination.....	4
Presence of fracture by X-ray.....	4 ¹³
History of occipital trauma.....	14
Hydrocephalus.....	5 ^{4,5,15}

C. Therapy

The first posterior fossa subdural hematoma which was treated successfully by surgical means was described by Coblentz⁴ in 1940. More recently, Estridge and Smith⁵ reported a case in a 3-year-old child successfully diagnosed and surgically treated. Despite the lethal potential of this lesion, 9^{4,5,15} out of 19 patients, where the diagnosis was made preoperatively, have survived. Usually the treatment of choice is simple suboccipital trephination; but with more acute lesions where the clot is predominantly solid, a more extensive craniectomy must be performed.

Summary

Posterior fossa hemorrhage constitutes only a fraction of a per cent of the complications of lymphomas. As far as can be determined, this report represents the first such case recorded in the literature and

discusses the lesion from the standpoints of incidence, etiology, clinical manifestations and therapy.

Acknowledgements

Doctor Harris Lovice of the University Hospital made the clinical records of this available for study and Doctor Mario Descalzi prepared the general autopsy protocol.

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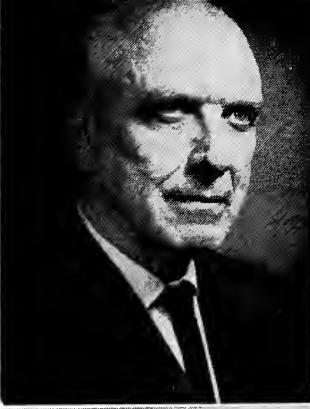
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Dean's **LETTER**

*Dear Students, Members of the Alumni, and
Friends of the Medical School:*

The curriculum at the medical school is designed to form habits of study and scientific discriminations in the student, and to give a basic background of knowledge and skill for the physician to develop into the medical career of his or her choice.

We endeavor, in so far as possible, in the teaching of medical students to have the faculty expert in their field. Individual subjects are taught as such. We do not endeavor to teach types of medical practice in the instruction leading to the M.D. degree. The instruction during internship and residency periods is aimed at the further education of the individual and the development of skills in specific areas of medical practice.

Medical graduate trends in the selection of a career are influenced by many personal and professional factors, and an awareness of the opportunities that exist for the individual. Prominent in the professional factors influencing career choice is the awareness of the great breadth of knowledge now existing in medicine, and the realization that it is possible for an individual to be reasonably proficient in only a limited field of medical practice such as internal medicine, pediatrics, or surgery. Even in such limited areas of practice the individual soon appreciates that expertness demands that a subsection of the specialty be chosen, such as cardiology, hematology, etc.

With these limits appreciated by the physician faced with career development it is soon evident that career choice also means joining a group of individuals with other specialties united in a clinic type practice if the best interests of patient care are to be served. These trends in medical practice are not confined to any area or medical school, they are national in scope.

The development of medical knowledge, diagnostic services, and skills, plus excellent transportation and communication services are causing the family physician to become an individual with specialized skills working in close conjunction with other individuals with different specialized development.

Today the medical graduate is not content to have a smattering of knowledge without expertness in any field. This trend is largely responsible for the constantly improving health program and medical care of the public.

Sincerely,

WILLIAM S. STONE, M.D.
Dean

George H. Yeager

Named Director

of University Hospital



DR. GEORGE H. YEAGER, a member of the class of 1929, has been named Director of the University Hospital. Dean William S. Stone recently made the announcement following recommendations of a Faculty Committee. Dr. Yeager assumes this administrative task after a long and successful career, not only as a clinical surgeon but as an investigator and medical administrator.

A native of Maryland, Dr. Yeager became interested in surgery following his graduation and served as resident in surgery at the University Hospital in 1932. Until the beginning of World War II, he practiced general surgery in Baltimore. At the outbreak of hostilities he joined the Surgical Service of the 42nd General Hospital and later succeeded Dr. Maurice C. Pincoffs as its commanding officer from 1943 until the end of hostilities. At that time Dr. Yeager transferred to the active Air Force Reserves, being promoted to Brigadier General in 1959. Since that time he has served as surgical consultant to the Surgeons General of both the Army and Air Force.

Dr. Yeager's civic activities have produced important contributions to medical

planning throughout the State. Following World War II he was named Chairman of the Medical Division of the Maryland State Planning Commission under which direct studies were undertaken which led to the reorganization of the State Health Department and the reorganization of tax resources for health and welfare. A thorough survey of medical education in Maryland has been completed. The Commission is currently studying nursing needs in Maryland. There have been two major surveys relating to public and private facilities available for medical care in the State of Maryland. For a number of years Dr. Yeager has been active in experimental surgery and has contributed numerous scientific papers on a variety of surgical topics. He has served as editor for two nationally known medical journals.

Dr. Yeager's immediate plans call for a continuing improvement in the medical, surgical, and ancillary services of the University Hospital with definite plans for expansion of both investigative and service functions.

Dr. Yeager will continue his surgical practice on a somewhat limited basis.



Doctor Smith Retires

DR. DIETRICH C. SMITH, Associate Dean of the School of Medicine and Professor of Physiology, will retire from the faculty July 1, 1965. At appropriate ceremonies at the Faculty Board Meeting on February 17, Dr. Smith was named Professor Emeritus of Physiology in the School of Medicine.

A member of the faculty of the School of Medicine, Department of Physiology, since 1937, Dr. Smith has served as Associate Professor and later as Professor of Physiology in addition to his part-time duties as Associate Dean, an office which he exercised with great dignity and distinction, earning him an honor award from the Medical Student Council several years ago.

A native of Pekin, Illinois, and a graduate of the Minneapolis public schools, Dr. Smith received his baccalaureate degree from the University of Minnesota and later the degree of master of arts from the same institution. In 1928 he received the doctor of philosophy degree from Harvard University. Then followed post-doctorate research for two years as a National Research Council Fellow in the Biological Sciences at Harvard University, continuing with Professor K. Frisch at the University of Munich through the year 1931. In 1933 to 1937 he served as Instructor in Physiology at the University of Tennessee College of Medicine. In 1937 he came to the University of Maryland.

In 1959 he was named Associate Dean of the School of Medicine and since that time has served as Chairman of the Committee on Admissions and has assumed responsibility for student affairs and scheduling.

Dr. Smith is a member of the American Association for the Advancement of Science, The American Society of Zoologists, American Physiological Society, the Endocrine Society, the American Association of Medical Colleges, the National Society for Medical Research, the Corporation of the Marine Biological Laboratory, and the Corporation of the Bermuda Biological Station.

Dr. Smith was one of the founders of the Maryland Society for Medical Research, an organization actively concerned with the availability of experimental animals for medical research, a society organized to strengthen the cause of research through the use of animals against those who would prohibit the practice.

In 1923 he married Miss Margaret Odell Todd of Minneapolis. Dr. and Mrs. Smith have a son, Dietrich Conrad Smith, IV, of Memphis Tennessee, and a daughter, Margaret Ann Smith of Baltimore, Maryland.

Dr. Smith has produced much interesting research chiefly of a neuro-endocrinological nature and is the author of some 50 original papers.

Baltimore City Hospitals Reorganized

FOLLOWING A REFERENDUM passed by the voters in the fall of 1964, the Board of Estimates of the City of Baltimore approved, on February 4, 1965, the formation of a new city department to be known as the Department of Hospitals. This action separated the Baltimore City Hospitals from the Department of Welfare of which it had been a subdivision for many years. As a part of this move, the hospital will now have a Board of Hospital Commissioners as the policy-making body governing its activities. These six commissioners appointed by the Mayor include Mr. Armin Fick, Production Manager of the Western Electric Corporation, and Messrs. Frederick W. Brune, retired Chief Judge of the Maryland Court of Appeals; Dominic Fornaro, President of the Baltimore Council of AFL-CIO Unions; Francis A. Davis, Jr., local businessman; Francis X. Gallagher, Secretary and member of the Board of Trustees of the Hospital Council of Maryland; and the Rev. Marion Bascom of Douglas Memorial Community Church. Miss Esther Lazarus, Director of Public Welfare, continues as an ex-officio member of the Commission.

Baltimore City Hospitals is one of the oldest hospitals in the State. The original

governing body of the Baltimore City Hospitals was appointed in 1773 by the act of the Maryland Assembly and was called the Trustees of the Poor. Their responsibility at that time was listed as the care of the worthy old, supervision of hospital wards, the care of the insane population, the housing of vagrants committed by magistrates, the supervision of charity beds in other hospitals, and the transportation of indigent non-residents to their original homes. With the incorporation of the City of Baltimore in 1797, the Trustees then reported directly to the Mayor. By 1899 the City Charter was revised and the name of the trustees was changed to the Board of Supervisors of Charities. On November 6, 1934, the City Hospitals became part of the Department of Public Welfare. The institution has progressed from a colonial almshouse to one of the country's outstanding medical centers. In 1964, the hospital counted 120,000 clinic visits, 30,000 emergency admissions, 11,600 elected admissions, 3,425 births and almost 4,000 operations. The hospital, actively affiliated with both the University of Maryland and the Johns Hopkins Schools of Medicine, also includes an active Gerontology Unit, a section of the National Heart Institute, National Institutes of Health.

Faculty Club Progress

ALUMNI AND MEMBERS of the faculty are informed that progress is being made toward the organization of a faculty alumni club for the Baltimore schools. A group of businessmen and financiers are in general agreement concerning the need for this facility to be built with the use of private funds. Discussion now centers on

the construction of a 16-story building at Fayette and Paca Streets. The building will contain mainly housing facilities for nurses and house staff, but included also are a faculty club with planned private entrance facilities. Nothing has progressed beyond this point. Alumni and faculty will be kept informed of future developments.

Faculty **NOTES**

Dr. Carroll Spurling Named Temporary Head of Clinical Laboratory in the University Hospital

DEAN WILLIAM S. STONE has appointed Dr. Carroll L. Spurling as Acting Head of the Division of Clinical Pathology in the School of Medicine, replacing Dr. Milton S. Sacks, who died recently.

Department of Anatomy

DR. GLADYS WADSWORTH, former Director of the School of Physical Therapy, has rejoined the faculty of the School of Medicine after two years during which time she served as consultant in the Division of Education of the American Physical Therapy Association with offices in New York City. Dr. Wadsworth will teach and conduct research in the Department of Anatomy.

Dr. Wadsworth was formerly a member of the Department of Anatomy serving as a graduate student under the late Dr. Eduard Uhlenhuth and had received training in physical therapy at the Walter Reed Army Hospital, after earning a Master's degree in health and physical education at Columbia University in 1942. At the University of Maryland, she completed her requirements for a Ph.D. degree in 1955. This was followed by a period of research in Germany under Dr. George Schaltenbrand following which she was named Head of the newly organized School of Physical Therapy. Dr. Wadsworth's present interest is in the biomechanical study of human motion in which normal and abnormal movement is studied.

Dr. Kuhn, V.P. in Charge; Baltimore Professional School to Move to the Baltimore Campus

DR. ALBIN O. KUHN, recently appointed Vice-President in charge of the Baltimore Professional Schools, will move his office from the College Park Campus to the Baltimore Campus on or about July 1, 1965.

Dr. Kuhn will be the direct representative and authority of the President with regard to the University's six Professional Schools in Baltimore.

Dr. Kuhn, an agronomist, is an alumnus of both the undergraduate and graduate school of the University of Maryland and a former associate professor in the Department of Agronomy. Following completion of the requirements for a doctorate at the University of Wisconsin, he was appointed Professor and Head of the Department of Agronomy, which post he held until 1955 when he was appointed Assistant to the President. Two years later, Dr. Kuhn became Executive Vice-President, a post he has held until his recent promotion.

Woman's Auxiliary Board of Hospital Continues Long Tradition

THE WOMAN'S AUXILIARY BOARD OF THE UNIVERSITY HOSPITAL, the oldest such organization of its kind in the United States, was chartered in 1890, assuming the responsibility for the care of hospital patients when the Sisters of Charity, who had operated the nursing service for many years, discontinued their interest in the institution.

Since then, the Auxiliary has continued its interest in patient care by raising funds for essential equipment and services. Such recent additions have included apparatus for anesthesia, orthopedics, speech therapy and pulmonary research. The Auxili-

ary has furnished a room for use in the cobalt irradiation treatment of cancer. The Social Services division of the hospital has been the recipient of more than \$1,500.00 for Out-Patient Service projects during the past year.

More Faculty Notes

DR. SAMUEL P. BESSMAN, Professor of Pediatric Research, has been named a member of the Scientific Council of the Maryland Academy of Sciences.

DR. GARDNER MIDDLEBROOK has been named Professor of International Medicine in the Institute of International Medicine.

DR. ROBERT W. BUXTON, Head of the Department of Surgery and Professor of Surgery, was recently named a member of the Board of Governors of the American College of Surgeons.

DR. FRANCIS A. ELLIS of the Department of Dermatology has been elected Vice-President of the American Dermatological Association.

Dr. Charles Reid Edwards Dies

DR. CHARLES REID EDWARDS, Professor Emeritus of Surgery at the School of Medicine, died February 1, 1965, after a long illness. Dr. Edwards was 76. Dr. Edwards' obituary will be printed in its complete form in a subsequent edition of the BULLETIN.

Dr. Eugene M. Farber Speaks on Psoriasis

THE FIRST ANNUAL ROBINSON DERMATOLOGIC FOUNDATION SYMPOSIUM was held in the School of Medicine on Wednesday, May 12, 1965. Dr. Eugene M. Farber, Professor of Dermatology at the Stanford University School of Medicine, spoke on the subject of psoriasis, a problem which has engaged Dr. Farber and his associates for many years. Introductory remarks were made by Dr. Raymond C. V. Robinson, Associate Professor of Dermatology.



Henry J. Walton, M.D. 1879-1965

DR. HENRY J. WALTON, Professor Emeritus of Radiology of the University of Maryland School of Medicine, died on January 24, 1965, at the age of 86, after a brief illness.

Dr. Walton received his early education at Friends School and the Baltimore City College. Following his graduation from the old Baltimore Medical College in 1906, he interned at Mercy Hospital.

Dr. Walton had planned a surgical career but by 1909 he was spending much of his time in roentgenology, a new emerging field of medicine. In 1911 he came to the University Hospital to assist Dr. Henry Chandlee organize a separate Department of Radiology at the University Hospital and the University of Maryland

School of Medicine, the first such in Baltimore.

Radiology at the University Hospital grew rapidly and in April of 1916, upon Dr. Chandlee's death, Dr. Walton was appointed head of the department and became the first full Professor of Radiology at the University of Maryland. Dr. Walton worked hard in the ensuing years to establish Radiology as a clinical specialty at the University Hospital. His papers published in 1930 on obstetrical radiology and pelvic measurements are classics. In 1923 he participated in the founding of the American College of Radiology and served as its President in 1940.

In 1941, after thirty years of service to the University of Maryland, Dr. Walton retired to devote full time to his private practice, but his retirement on this occasion was for only a brief period. Shortly after the outbreak of World War II, he returned to the University Hospital in 1942 to serve as the acting head of the department until 1945, when he was appointed Professor Emeritus. He continued his private practice in association with Dr. Walter L. Kirby and Dr. Charles N. Davidson until 1954.

In 1960 Dr. Walton established the Henry J. Walton Lectureship in Radiology of the University of Maryland School of Medicine, to bring noted radiologists and physicians to the University of Maryland.

Dr. Walton was a member of the Baltimore City Medical Society, the Medical and Chirurgical Faculty of Maryland, the Southern Medical Society and the American Medical Association. He was also a former Chairman of the Radiological Section of the Baltimore City Medical Society and of the Southern Medical Association.

JOHN M. DENNIS, M.D.

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Prognostics, Predictions and Plans

WHILE THE BULLETIN summarizes certain highlights of the past 50 years of its publication, certain members of the faculty and alumni have been asked to predict what the future of their specialty might hold for the next 50 years. Readers of the BULLETIN in 2015 will be the judge of the accuracy of these predictions. That science and Medicine are rapidly moving toward important solutions is certainly reflected in the past 50 years of the BULLETIN. We hope the thoughts of these serious scholars will be interesting and provocative. Their validity and accuracy will have to wait.—ED.

Medicine

THE DEPARTMENT COMPRISES general medicine and a number of subspecialty divisions. Teaching is a prime obligation, yet research is essential to maintain a proper teaching environment. Good teaching and research have served the essential role of keeping the student, house staff and faculty abreast of medical progress. Moreover, it has helped disseminate current medicine to members of the profession through postgraduate activities. Specialists within the Department keep pace with general medicine, in most instances by their participation on the medical wards and in the clinics. Small group teaching and preceptor research began at mid-century and have provided media for promising and well-motivated scholars to develop their skills in the University environment. Many have received advanced training in leading medical centers. Cross participation between departments has expanded appreciably through the development of better diagnostic facilities for cardiovascular-renal diseases, infectious, gastrointestinal, pulmonary, rheumatic, hematologic, dermatologic and endocrinologic disorders, as well as in the use of radioactive isotopes. The Clinical Study Center with its supporting laboratories has greatly enhanced interdepartmental research.

Maryland medical students have made very acceptable records as house officers in affiliated and non-affiliated hospitals and have

scored well in National Board Examinations. Stress must continue on maintaining these high teaching standards and in the selection of young men and women well-motivated to medicine and in the care of patients.

The future is challenging. Community and rural needs must be stressed in our educational program. Participation by our house officers in community hospitals and in ancillary health programs must increase. Our curriculum and our research should be guided partially by rural health problems, industrial hazards and social trends. National and international developments must fall within our range of interest. Tropical disease is a misnomer, and with high speed travel, we must broaden our scope to understand diseases not endemic in the United States.

Faculty members must be provided adequate salaries and proper facilities for the conduct of their research. The Department needs to expand significantly its capacity in the field of genetics. The mysteries of cancer and many systemic diseases will be unravelled through such knowledge. The fine beginnings by Department members in the basic sciences must be expanded to improve teaching and research.

Through the changing activities in the emergency room and medical clinics, the Department is performing the general practice of medicine. This is caused partially by a change in the medical profession itself. We must cater to these new demands by provid-

ing services for the indigent as well as for those who can pay. Home care services by students and house officer training in general practice will be necessary. The aging population and marked increase in chronic diseases stress the need for integration of the medical service and the chronic disease hospital.

Although Departmental participation supports a large part of the School's postgraduate program, it must expand in order to continue our obligation to the Maryland profession. Refresher teaching programs for the practitioner must provide the means for practical patient workup. Whenever possible, we should discharge our responsibilities by helping implement the education programs of non-affiliated hospitals. Much progress has already been made. The Department now sponsors a modest program of visiting guest speakers and educators. This serves as a stimulus and provides valuable contacts for the school and for faculty members. Departmental members will continue their participation in other medical centers.

Progress in medical science and technology must not shift the focus from the patient. In spite of future advances in knowledge, the patient examined by a careful physician who takes a precise history will have the best chance for recovery. Diagnostic methods applied to the difficult case will become increasingly complicated and it will be difficult for the specialist to remain in full touch with his field. The intelligent and perceptive physician will be the one who realizes his limitations and seeks proper assistance. The patient will fare better under such care. In our future activities, we must cater to the practitioner, specialist, teacher and investigator.

The writer, interested in infectious diseases, looks to further fundamental developments in this field during the next 50 years. Full knowledge of the physiologic and metabolic abnormalities created by the microbe or its toxin will be clarified. Mechanisms of tissue injury will be defined. This knowledge of fundamental abnormalities will lead to appropriate corrective measures, such as replacement of electrolytes, minerals, metabolites, anti-metabolites or essential nutritional fractions needed to halt and reverse the cellular damage created by the infection. Antibiotics and chemotherapeutic drugs may play

a minor role in treating patients with infectious diseases. There are important leads already. Susceptibility and resistance will be better understood and geneticists will control many of these clues.

THEODORE E. WOODWARD

Obstetrics and Gynecology

I FORESEE MANY changes in the practice of Obstetrics and Gynecology during the next 50 years.

Probably the most notable of these changes will be in the conduct of labor as we know it today. Research is coming very close to the answer to what causes the onset of labor. I predict that during this era the onset of labor will be electively induced in most cases by methods other than are utilized today.

Fetal hearts during labor will be monitored on a large screen that is centrally placed in a labor suite, and the cervical dilations and descent of the head will also be electronically determined rather than by the use of rectal and vaginal examinations.

Since many of our research endeavors are emphasizing neonatal mortality and morbidity, there should be much progress made along these lines in the future. Certainly, the problem of Erythroblastosis Fetalis is one area for improvement.

Gynecology in the future will become more of a medical than a surgical specialty with a greater emphasis on the hormonal approach to many of our pathological states. It is conceivable that uterine fibroids may be treated with anti-estrogenic substances and thereby be caused to shrink. Even today abnormal bleeding of a gynecological origin is being approached more frequently by hormones which simulate the cyclic estrogen and progesterone produced by the ovary. Endometriosis and carcinoma of the generative tract may be cured by chemotherapeutic and hormonal agents.

Despite the increased emphasis on research and full time personnel, there will be an increased need for persons who are willing to practice bedside Obstetrics and Gynecology. The day of a staunch individual practitioner of Obstetrics and Gynecology probably will be replaced by associations, which is the only sensible way of practicing Obstetrics.

NORMAN LEVIN, M.D.

Pathology

THE GROWTH IN our knowledge and understanding of disease is taking place on an ever broadening front and in formerly inconceivable depths as the fundamental advances of chemistry, physics, and mathematics become increasingly applicable to the problems of medicine. Such growth has forced the specialization which has now become the rule rather than the exception. Medical practice of necessity is changing to the group or "clinic" form.

The economic and political roles are similarly bringing major changes in medicine and medical practice through their influence on financing of education, research, and medical care.

Barring a major catastrophe, there is no doubt the scientific growth and specialization in medicine will continue and it is difficult to conceive of any lessening of the economic and political forces toward centralization and socialization of this "Great Society." Thus, just as medicine and surgery are becoming a confederation of subspecialties, so pathology in the next 50 years can look forward to subspecialties of its anatomic and clinical branches. It seems inevitable that the field of anatomic pathology increasingly must develop experts on each of the various pathophysiological systems: e.g., neurological, cardiovascular, respiratory, hematologic, renal, gastrointestinal, etc. Such a specialization already exists at the Armed Forces Institute of Pathology along with radiation and aerospace sections. It seems equally inevitable that the intricacies of techniques and special knowledge will similarly fragment clinical pathology into relatively independent sections including virology, metabolic chemistry, immunochemistry, biophysics, blood and tissue banking, and computer science, to mention a few.

Heaven forbid, each of these disciplines will have their own Board Examination and certification for the Specialty. Present Board Examinations probably face platooning with first qualification as a utilitarian generalist for hospital and general laboratory practice and second, qualification as a subspecialist for medical center, university or consultation type practice.

Finally, how is all this to be administered? God may know, but I don't.

HARLAN I. FIRMINER, M.D.

Pharmacology

THE ONE PERMANENT characteristic of the science of pharmacology is change. This ever-changing armamentarium of the physician is made possible through the indefatigable efforts of the organic chemist in providing new chemical compounds, different creations of matter, that are screened by the pharmacologist for their possible use in the treatment of disease. The future offers hope for great achievements that perhaps lie just over the horizon.

1. It appears that deep visceral pain will be obtunded without the fear of drug addiction by the use of benzomorphan derivatives.

2. The last two decades have witnessed the conquest of infectious diseases, that are bacterial in nature. The near future will see the drugs available for the treatment and cure of viral infections that will in all probability include the common cold and its sequelae.

3. Success in the treatment of mental illness with drugs during the last decade bespeaks the synthesis of drugs capable of modifying aberrant human behavior and the restoration to normal behavior patterns of the schizophrenic patient.

4. Biochemical studies of the genetic code and its malevolent modification by thalidomide to produce phocomelia suggest the possibility of benevolently correcting genetic defects with drugs. This could eradicate congenital disease and produce a race that is healthier and happier with an increased life span.

These achievements are dependent upon unhampered progress in the basic medical sciences . . . the earnest and unimpeded endeavors of men dedicated to the time-honored principle—"That ye may have life and have it more abundantly."

JOHN C. KRANTZ, JR., PH.D.

Postgraduate Education

THE RAPIDLY CHANGING patterns of illness demand and continue to demand an ever-changing medical school curriculum. These new emerging patterns of illness will require an increased emphasis on continuing postgraduate education for doctors in the practice of clinical medicine. The material they learn in medical school will, in part, soon be outdated and new illnesses not mentioned now or known of will challenge their inge-

nuity. Those illnesses which have demanded our attention in the last three decades will ultimately not constitute the magnitude of threat they once did. This is a tribute to those who made the significant scientific contributions and to those clinicians who translated this knowledge to more definitive patient care.

Traditional medical school education has, for the most part, focused on the accurate diagnosis and the best possible medical or surgical treatment of any sick patient. Only recently has the concept of preventive medicine and the concept of comprehensive management been a major concern of curricular committees. These concepts will receive even greater emphasis in the years ahead. Investigation into and implementation of new knowledge concerning the epidemiology of disease and the ecology of illness and health, both mental and physical, will continue to occupy an increasingly respectable position in the hierarchy of medical disciplines. This area of research, knowledge and practice is not and will not be solely the responsibility of schools of public health and associated government authorities, but will have been firmly received by medical schools, nursing schools and schools of social work.

Postgraduate medical education will have several challenges to face and solve in the future, just as it does today. However, the future will probably compound these challenges because of the ever increasing rapidity of change taking place in every aspect of social as well as professional life. It must constantly offer opportunities for those physicians in the practice of medicine and surgery to acquaint them with the newer detail of the rapidly advancing scientific progress of medical knowledge. Various diagnostic laboratory procedures allowing earlier and more precise diagnosis have been and will be evolved with the increase in the advance of scientific knowledge in the fields of microbiology, hematology, biochemistry, nuclear medicine, and electronic technology. The contribution of this research and new knowledge should be translated into significant patient care as soon as possible. Postgraduate medical facilities should offer the practicing physician the opportunities to return to the medical school or teaching hospital center and to become familiar with newer techniques of diagnosis and definitive med-

ical and surgical therapy. Conversely, medical school cadres should visit those communities geographically separated from the medical school-teaching hospital complex and present pertinent practical material. This can be a learning experience of mutual benefit since the practice of medicine away from a hospital setting offers a diversity of problems not usually encountered in the hospital. Postgraduate medical faculties should assume some responsibility in the education of paramedical personnel and members of allied disciplines, such as nurses, social workers, teachers and other key members of the community. Postgraduate medical faculties should assume some responsibility in the education of the practicing physician in the multifactorial concept of the etiology and management of most illnesses and the possible psycho-physiological correlates associated with most illnesses.

Only by the vigorous pursuit of these goals will the hiatus in the field of medicine (which threatens to get larger) between what is *known* and what is *practiced* be filled. Only by the implementation of this interchange between the medical fraternity will "instant obsolescence" be avoided.

EPHRAIM T. LISANSKY, M.D.

Law and Medicine

THE MEDICO-LEGAL field 50 years in the future? What possibilities for speculation this presents; particularly in the sub-specialty of my special interest, psychiatry and law.

It was only 56 years ago that the first English translation of one of Freud's works, *Selected Papers on Hysteria*, was made. In the half century we have just completed, psychiatry has advanced immeasurably. Unfortunately, in that field of law where cooperation with psychiatry has been necessary, advancement has not been so marked. Traditional legal concepts such as the binding effect of legal precedent, *stare decisis*, give proof of the underlying conservative philosophy of jurisprudence. Nevertheless when society requires the two disciplines to cooperate in the pursuit of justice, it seems rather a pity that the one does not keep pace with the other, and that communication between them is, to say the least, most difficult and, on certain points of contact, practically impossible.

In forecasting the future, perhaps a half century of time may see improved communication between these professions. Still, there is only slight hope so long as medicine continues its rapid advance and law persists in its reluctance to adapt itself to modern medical thought.

However, one might at least hope for a simple recodification of the statutes dealing with the mentally ill. A recasting of the statutory language in more modern and, hopefully, medically acceptable terminology would help. Perhaps we will find no longer will terms be used that possess multiple disparate meanings in law yet have no significance in medicine, for example, such Elizabethan terms as "lunatic" and "insane."

Five decades may even bring us a more enlightened approach to the management of the mentally ill offender. One can hope for a system of justice which more efficiently combines two of the aims of the criminal

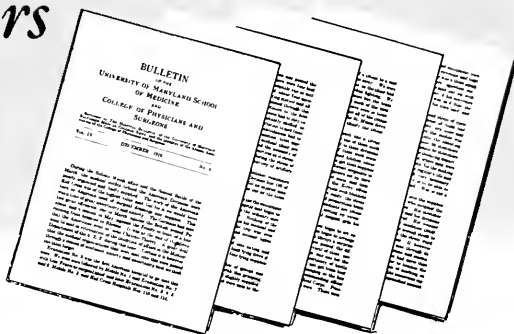
law, *viz.*, the protection of society and the rehabilitation of the accused. In 50 years we may find that the quality of the offense is no longer the measure of punishment or disposition but rather that the treatment of the offender is shaped by concern for the accused's capacity for rehabilitation. Today, we have already taken a first and important step toward this objective in the Defective Delinquent Statute and its Patuxent Institution. This could be a pattern for the future.

After half a century we may see the law making greater use of experts in other fields, the psychiatrist, the sociologist and members of other non-legal segments of society, when it is called upon to determine the disposition and course of management of the offender.

Always one may dream.

L. WHITING FARINHOLT, JR.
Professor of Law
Professor of Law in Psychiatry

Pages from the Bulletin of yesteryears



BULLETIN OF THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE AND COLLEGE OF PHYSICIANS AND SURGEONS

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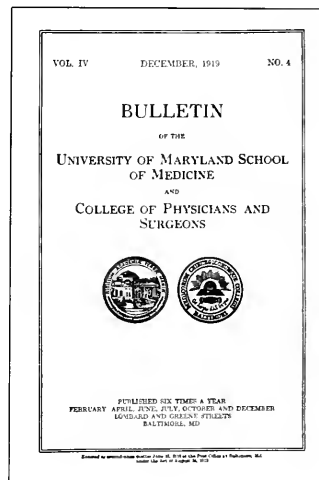
No. 4

EVACUATION HOSPITAL NO. 8

By LIEUT.-COLONEL ARTHUR M. SHIPLEY, M.C., U. S. A.

During the Belleau Woods affair and the Second Battle of the Marne, the medical outfits behind the American Divisions were poorly organized and badly supplied. The work of the American Red Cross was of the highest value, and but for it we would have been in desperate need of surgical dressings and supplies. This was a time of great uncertainty and anxiety. The Germans had won two great offensives, one in March, against the British around Peronne, and a second, in May, against the French in front of a line running from Soissons to Rheims. It was at the end of this drive that the Americans went in, near Chateau-Thierry. A great deal may be said in extenuation of the condition of affairs in the Medical Department of the A. E. F. during this time. Certain it is however, that the medical organizations that were sent into this area passed through a period of confusion, anxiety and uncertainty that we shall not soon forget.

Evacuation No. 8 was the first American hospital to go into this area. We were soon followed by Mobile No. 1 and Evacuation No. 7 with Don Peters as surgical chief and later Evacuations No. 3, 4, 5, and 6, Mobile No. 2, and Red Cross Hospitals Nos. 110 and 114.



The great war was now a memory and members of "Evac 8" had returned home. The volume, Stretchers, narrating the experiences of this and other units, had been published. Dr. Arthur M. Shipley, professor of surgery, was asked to write for the BULLETIN and his article, running through 2 numbers of the BULLETIN, Dec. 1919 and February 1920, follow.

During the early phase of the Second Battle of the Marne, Red Cross Hospital 110 was bombed. I have been over the matter with Major McCoy who was in command and operating at the time of the raid. It was a clear night, the hospital group was plainly marked and there was no ammunition dump, rail head or artillery near. The Hun plane flew low over the hospital and turned and flew back, shut off his motor and flew within a few hundred feet of the ground over a row of big ward tents and dropped his bombs on alternate tents. They were just up the Marne from us; we heard of the raid very soon, and had an anxious time waiting our turn.

The Argonne offensive began September 26. By this time we were well organized and prepared to take advantage of the experience gained by having passed through three drives.

An explanation of the organization and activities of an Evacuation Hospital may be of interest. The British call them Casualty Clearing Stations and the French, Evacuation Hospitals. They are a most important link in the chain of medical stations that extend from just behind the actual fighting front back to the Base Hospitals. When a man is wounded he is picked up as soon as possible by the stretcher bearers of the Medical Department and carried back to the dressing station, which is placed as far forward as the ambulances can get. The distance between the actual fighting front and the dressing station depends upon a number of things, such as roads, terrain, shelter, and rapidity of advance. It will average one to two miles. If a wounded man cannot walk he must be carried this distance by stretcher bearers, and many of them were killed while performing this duty. Brassards, worn on the arm, were some protection from sniping and machine gunning but artillery took a heavy toll, as the lines of communication were heavily shelled during an engagement. The dressing stations were usually very cramped. They were sometimes placed in a dugout or in the cellar of a demolished house. All sorts of makeshifts were used. I saw the dressing stations of the 79th Division with Colonel Hunington late in the Argonne. There were two of them and they were excavations made in the side of a cliff that ran parallel to the left bank of the Meuse. They were very crude affairs, with room enough for several stretchers and a few sitting patients. They were admirably placed, however, for they could not be reached by direct fire, as the face of the cliff was away from the front.

The ambulances came up to the dressing station and carried the wounded back to a field hospital. Ordinarily there were four field hospitals attached to a division. One of these hospitals was as well placed as possible, as far as roads were concerned, about four miles from the front. This was used as a triage or sorting station and all wounded and exhausted men from the division passed through this station. The ambulance trip from the dressing station to the field hospital was a very hazardous one. The ambulances had to stay on the roads, and the roads were being almost constantly shelled, as these same roads were used for all sorts of transportation to and from the front. More than this, during an offensive, ambulances had to give right of way to other things: men, ammunition, food, supplies. Many of the roads were so narrow that streams could not move in opposite directions at the same time, and the necessity of combat compelled the ambulances to wait. As heartless as it seems, the wounded man is a secondary consideration during the stress of combat, when a single battalion of infantry or battery of artillery may turn the tide of battle.

During the Belleau Woods fighting the ambulance companies that evacuated the wounded men of the Second Division lost 100 of their number. It was by no means uncommon for an injured man to say when speaking of his wounds—"I got this one at the front and this one in the ambulance coming back."

During the early days of my experience I used to see the ambulance drivers jump out as soon as they reached the hospital and begin to examine their cars minutely. I thought this was the ordinary care that a good driver gave to the fitness of his car. Nothing of the sort. He was looking for fresh dents and cuts on his machine and there was a great rivalry among them after the trip was over. Most of the ambulance running was at night and without lights. They were a great lot of youngsters, these drivers!

At the dressing station the men were divided into sitting and lying cases. It was important not to send a man back lying down if he could sit up, as the average ambulance carried four lying patients or nine sitting ones.

At the triage they were divided into a number of groups and evacuated to different hospitals in conformity with this grouping. Ordinarily the grouping was into severely wounded, slightly wounded, gassed, infectious diseases and sick. The wounded were sent to the Evacuation Hospitals or the Mobile Units and the gassed, infec-

tious diseases and sick separately to the other three field hospitals.

The Evacuation Hospitals were usually from 7 to 10 miles from the front. They were well out of reach of the light artillery but within the range of the "heavies" and, of course, were subject to bombing. The difficult thing was to place them along the lines of communication, and at the same time far enough away from ammunition dumps and rail heads not to invite shelling or bombing. They were plainly marked with big crosses made of different colored stone laid out on a clear space, so as to be easily seen from the observation planes and to show up in photographs. If there were buildings in the hospital group, red crosses were often painted on the roofs. This was most important, as wounded men in large numbers could not be moved into dugouts if the hospitals were subjected to much shelling.

During the Argonne offensive, we were at the top of our strength. We had about 1000 beds for patients, 410 enlisted personnel, 65 medical officers and 75 nurses. Two ambulance companies were assigned to us for evacuation back to the hospital trains at the rail head. A group of Smith College alumnae was also attached to us. This consisted of four or five women sent over and supported by the alumnae of Smith College. They were a splendid group. They set up a tent just opposite the receiving ward and beside the main road, and kept always on hand a supply of papers, hot chocolate, and cheerful conversation. Occasionally they had tea and little cakes. Once they had ham sandwiches. They would never tell where they got the ham. One of their number was a very diminutive, attractive and fearless young person, who drove a Ford truck all over the place in quest of supplies. She usually hunted alone and generally had a smudge of dirt across her face, because her particular truck was often in need of tinkering. As a driver she won and maintained a reputation among the daredevil French and American drivers, which is no mean praise. There were no speed regulations up there. One day when the roads were particularly muddy and slippery, she came nonchalantly skidding her way down the road and with a final flourish turned into the hospital grounds. A group of artillery chaps were hiking along the road and one of them said to the other, with the usual garnish of cuss words, "There goes that Smith College Barney Oldfield." When told this she showed no elation, but privately I do not think

she would have exchanged the compliment for the Croix de Guerre with palms.

We were in a field that sloped from the edge of a woods to a well kept road that ran up toward the front, some miles away. We were mostly in tents, but there were a few wooden huts, as the place had been an old French field hospital during the Verdun fighting. We were four miles from Verdun. The huts had floors but the tents did not. It was getting cold and it was raining most of the time, and the mud was everywhere. Most of the officers were in tents, and at first a part of the nurses also. Later we got all of the nurses into huts. At first we had no stoves, but after the St. Mihiel drive we got enough stoves from German dugouts to supply our wants. We usually managed to get wood.

An Evacuation Hospital is organized very much like a circus. It is divided into different departments and each one of these must look out for itself. Officers and men are assigned to these divisions and when the hospital moves to a new site all of these work separately to get ready. The mess officer, the cook and kitchen police set up the kitchen, the quartermaster and his men get their supplies under canvas, and arrange things in order. Different sergeants in charge of groups get the tents up; groups of engineers set up their mobile electric light outfit and wire the different units, and then, if possible, pipe water to the operating hut; the X-ray officer and his assistants set up the X-ray and fix a dark room with blankets used as curtains; the druggists get the drug tent ready; the the shock officers arrange the shock wards; the recovery and preparation tents are set up; the operating room nurses and attendants are establishing an operating room, unpacking supplies, setting up tables, etc.; the laboratory is unpacked, and the dental surgeon gets his work shop ready.

As soon as the ward tents are ready, other men begin to set up the cots, and as soon as these are ready the nurses begin to arrange them and to gather their ward supplies. It was always a surprise to observe in how few hours after reaching a new station the different messes would be running. There were several of these, one for the men, one for patients, one for the nurses, and one for the officers. And during all the movement and uncertainty of battle there were only one or two days when we could not get fresh beef from the supply dump, which was constantly changing as the line was altered.

The hospital was in charge of a commanding officer who, for the most part, was a colonel in the Medical Corps. Practically all the other medical officers were reserve men. There were a surgical chief and a medical chief, usually majors or lieutenant colonels, an X-ray officer, officer in charge of the laboratory, a dental surgeon, a mess officer, a quartermaster, and an adjutant. Evacuation No. 8 had five surgical teams, and the remaining officers were ward surgeons. There were 18 officers and 179 men of us when we left this side. We did not get our nurses until we reached our first station. We were augmented until we reached top strength during the Argonne.

The arrangement as to surgical teams was a very good one. At Chaumont there was maintained a headquarters for these teams. They consisted usually of a surgeon, an assistant, an anaesthetist, two nurses and two medical department men, as orderlies. They were sent about from hospital to hospital as needed. During an offensive there was always a shortage of surgeons. These teams were numbered. When a new hospital reached France the teams would be sent up to a working hospital as observers. Just before an offensive began the surgical teams normally attached to an evacuation hospital would be augmented by teams set up from Chaumont. From a surgical standpoint this was one of the most interesting assignments in France and many surgical directors of base hospitals were sent to the front in this way. At one time we had the surgical directors of four base hospitals assigned to us as team heads—Lieutenant-Colonel Lilienthal, Lieutenant-Colonel Evans, Major Weeks and Major Hennington. Lieutenant-Colonels Edmunds and Coleman were both assigned to us as team heads.

Our commanding officer was Col. J. F. Hall, a Harvard graduate who had seen service in many parts of the world. I am very grateful to him for his uniform kindness and courtesy to me, through the many trying vicissitudes of our work together.

Eugene Hayward was head of a surgical team and saw service in a number of Evacuation Hospitals. After we were sent into Germany he joined us and when I was ordered home, he relieved me. We did a lot of tramping together while doing our bit of "Die Wacht am Rhein."

Wounded men were brought from the triage to the Evacuation Hospitals by ambulance. Most of the time we were receiving only the severely wounded. These men had been dressed

at the dressing stations and, if necessary, dressed again at the field hospital. Otherwise they reached us just as they left the firing line—that is, fully dressed and with their equipment. What the soldier brought back was divided into three classes. His clothing and equipment were put on the dump, his valuables were put in an envelope and kept until he recovered from the anaesthetic, but there was a third group that required great care. This included his letters, cigarettes, etc., and especially his souvenirs. A wounded man would put up with the loss of his money with very little complaint, but, if his souvenirs were lost, his woe was great and audible. It was said that the British were fight-for their homes, the French for their land, and the Americans for souvenirs.

All of them came in dirty, most of them wet and many of them cold. It was very noticeable, however, that most of them had clean skins under their dirty clothing. They were very quiet and waited their turn with cheerful patience. When the soldier was removed from the ambulance he was carried into the receiving hut. This was a big shack that would hold about 80 stretchers. There were four reserve tents that could accommodate 40 stretchers each. So there was room for 240 stretchers in the receiving department. At the far end of this tent were two tables, where men were detailed, whose duty it was to get the necessary data for the making out of the many reports, which are the joy of the regular's life and the bane of the reserve officer's existence. All very necessary, however, when it is remembered how important it is to be able to accurately trace the wounded or to locate the dead. War is not a pleasant thing.

From the receiving ward the men were carried into the preparation room. Here there were a number of teams who stripped the wounded man and put on him a suit of pajamas. His stretcher was then lifted on to a kind of improvised trestle and his dressings were cut down and the surrounding skin shaved. His wounds were inspected by the receiving officer and their condition noted. Clean dressings were applied. If he were in grave enough shock to warrant treatment for it, he was sent at once to the shock ward, where he came under the care of the shock officer. If, however, the wounded man were fit for operation he was sent through the X-ray room. This was in charge of Captain Alleman and reached a very high state of efficiency. Most of the men had more than one

wound. It was the duty of the X-ray officer to localize the foreign bodies. This was done chiefly by a system of marking on the skin, one mark for the vertical ray, another for the transverse ray and another for the point where the foreign body approached nearest the surface. Other points, such as shape and size and relation to bone were noted on a form that accompanied the patient. All of this was done through the screen in the dark room. Few plates were made. My admiration for the speed and accuracy with which this work was done never waned. We learned to rely on the X-ray men implicitly. Just beyond the X-ray room was another room where the men waited their turn to go into the operation hut. Some cases took precedence over others. Hemorrhage went first, sucking wounds of the chest next and then abdomens. The men lay side by side on stretchers placed on the floor. The room was warm and dry and they were given cigarettes. For the most part they were quiet and cheerful, and glad to be alive. There would be some talk among them. They answered questions briefly but willingly. They were wonderful patients. All young, all of them lean and very fit, with little anxiety and no psychic shock. They had been through Hell and back but said nothing about it. It was a great stimulus to see them and a great privilege to do something for them. It was a long time before I could look at them without wanting to cry.

About four o'clock one night toward the end of the Argonne offensive a battalion of men passing the hospital began to sing. This was most unusual. Men had apparently forgotten how to whistle or sing. It was cold and raining and the roads were very muddy. These men were going toward the front and expected to go into the line in the morning. They had been marching all night carrying equipment. They saw the ambulances turning in and knew they were passing a hospital. So in order to cheer up the wounded and to show how they themselves felt, they began to sing. They sang "The Old Grey Mare Ain't What She Used To Be," and at the end of each verse they gave the Rebel yell. We found out they were part of the 81st Division, National Army troops from the Carolinas and Tennessee. They called themselves the "Wild Cats" and wore a rampant wild cat as division insignia. They were going in for the first time. Only a few months before nearly every one of them had been tucked in at night by his mother and here they were at four o'clock

in the morning, wet and cold and hungry, marching in the mud and dark toward battle and danger, and for many of them sudden death, and yet they found the courage to sing. We had been working all night and the number of wounded was steadily mounting, but when we heard them singing, we were just a little more careful of the next wounded man that came to our tables. Within the next few days 630 wounded men from this division were admitted to our hospital.



In the spring of 1918 when the American troops were arriving in France in sufficient numbers to be of material help, the Western Front was roughly divided into three great parts. From the Channel to Montdidier the line was held by the British, including her colonies and the small Belgian army. This was a long stretch of front in which there were many famous salients and battle fields, Ypres, the Somme, Passchendaele, Cambrai, the Yser, Peronne. These troops were fighting to hold the channel ports.

From Montdidier to the edge of the Argonne was that part of the front in which the French had been doing the most of their active offensive and defensive work. That part of it which ran through Soissons and Rheims was directly north of Paris and from Rheims to the Argonne the front ran through Champagne, about 20 miles north of Châlons and roughly parallel to the Marne River. The French were fighting here to save Paris.

From the edge of the Argonne, through this forest, to the Meuse, across the Meuse and around Verdun down to St. Mihiel and thence in front of Toul, Nancy, and Belfort to Switzerland was a long stretch of front, easy to defend, because of its hills and woods and this had been a quiet sector since the close of the great Verdun offensive and counter offensive that ended in December, 1916. It was here that tired French and German divisions went to recuperate and rest. They watched each other over this long stretch with very little fighting. In the early days of the War the Germans tried to break through around Nancy and failed and in February, 1916, they began the most stupendous drive of the War at Verdun and failed again, as all the world knows. From then until September, 1918, all this front was known as a quiet sector. It is interesting to note that, when the war

began, Foch was at Nancy in command of the 20th French Corps.

The same hills and woods of the Argonne and the Vosges that made it possible for the French to turn back the German advance, led the French not to attempt any offensive against the Boche and so things were rather quiet until the American First Army was transferred late in August, 1918, from the Marne country into this quiet sector. There was nothing quiet about it after that. Evacuation No. 8 was transferred from the Marne to near Verdun late in August and from the day of our arrival we began to suspect that any idea we might have entertained about a quiet sector was going to be rudely dispelled. Our awakening came soon enough.

In 1914 Fritz had driven a salient south of Verdun across the Meuse at St. Mihiel. This was part of a huge attempt to turn the right flank of the French Army, then fighting for Paris and its very existence, along the Marne River. Afterward it developed that the first all-America show was the reduction of this salient.

Evacuation No. 8 traveled from Juilly, our Marne station, to Neufchâteau by train, but from here to our new station we went by truck. It required 110 big trucks to transport us. This will give some idea of the magnitude of the transportation problem. As strange as it afterward seemed, this was a dusty trip.

There were three Evacuation Hospitals very near each other, Numbers 6 and 7 at Souilly and No. 8 about 3 miles up the road toward the front. All this country had been shot up during the Verdun offensive. We were very curious and a bit jumpy. The Boche had evidently found out that something was going on as he began to shell the cross-roads. There was a French Mobile Unit set up beside us. They were not very mobile as they had been there two years. The French had a genius for making themselves comfortable in spite of the difficulties of warfare. They were in wooden huts, all floored, with electric lights and well laid out stone paths from hut to hut. They invited some of us over to their mess from time to time. Taking into consideration their nearness to the front, the scarcity of food and the difficulties of transportation, they had a splendid mess. The hospital maintained a large garden and had plenty of fresh vegetables. They are a wonderful people.

The best exponent of the art of "Carry on" that I saw was the French farmer's wife in the area just behind the front. Unless she was driven out by actual fighting she stayed at the

farm. All the able bodied men were gone these four years, every single one of them, and many of them were dead. The farm villages were more or less destroyed by shell fire. Every available foot of space was used for the billeting of troops, on their way up, or on their way back. She ran the farm with the help she had—some old men and boys, but for the most part with women and children. She was the first one up in the morning and the last to go to bed. She could find the time to cook you an omelette served with bread and butter and to see that your linen was washed. My linen was plainly marked and I made a list for her in French. She used this list as her bill and I did not lose a single thing through her, although there were many of her in different parts of France. If you chanced to speak of her men folks she would cry a little; she scolded everyone volubly, and most of us deserved it, for she was "fed up" on soldiers, who are often a nuisance when not fighting, but for unadulterated tenacity and grit she was the real thing.

I had been left behind at our old station as Commanding Officer until relieved by Base Hospital 57. They arrived in a week but I had to remain a few days longer until everything was properly accounted for and turned over. My trip from Juilly in the Marne country north of Paris to our new station near Verdun will illustrate the vicissitudes of travel in the A.E.F. Sergeant Kopenhaver, a regular for many years, had been left also to prevent me from getting the records all messed up. If you send forward a single report, with any little thing not just as it should be, that same report will follow you like an avenging fate and every "waffle tail" who sees it will send it back again with an additional notation "Please advise."

We traveled from Juilly to Paris by local train, from Paris to Chaumont by express, a good train, from Chaumont to Bazoilly with T. R. Boggs in an automobile. We spent the night with the University of Maryland Base Hospital and I had a fried egg and some bacon for breakfast. I thought of that egg many times after that with yearning. We went from Bazoilly to Neufchâteau by motor cycle, from Neufchâteau to Gondrecourt by a freight train, from Gondrecourt to Bar-le-Duc on the Paris express, from Bar-le-Duc to Souilly in a truck and after much difficulty with the French telephone, Colonel Hall, our C.O., came out in his car and carried us to camp. They seemed glad to see me and my heart was warmed.

All this country behind the Argonne was dotted with permanent camps; many of these were camps for the artillery. Horses can stand much less hardship than men, and it was by no means an uncommon thing for a regiment of artillery to lose half of its horses during a long offensive. Late in the War most of the heavy guns were transported by motors. The light field artillery, French 75's chiefly, were practically all horse-drawn, and they were fired at close range, and were stationed wherever they could find shelter. The motors would mire if they left the roads. It was absolutely necessary to get these horses back from time to time where they could sleep dry and be fed regularly. It was just as necessary that these camps be not seen by the German observation planes, otherwise the Boche artillery would wipe them out. So they were placed in the woods, usually near the bottom of a steep ravine. This afforded good drainage and the steep hillsides were a great deal of protection from the long range shelling. There were a number of these camps near us, Cinq Frères, Arlette, La Morlette, etc. They were very crude affairs with long sheds for the horses and dugouts for the men. In the woods just across the field from us was a big veterinary camp. There were many sick and lame horses here. These camps made a pest of flies in the summer, but by September the nights were getting so cold that the flies all disappeared. There was another reason that made these permanent artillery camps somewhat unpleasant neighbors as Fritz had a way of coming over at night and trying for them with his bombing planes.

We were not under cover, but out in the open. We depended upon our Red Cross markings for safety during the day, but at night these markings could not be seen, so that at night it was a matter of grave import not to show a light. How difficult this was may be imagined when it is noted that we were running a thousand bed hospital and were working often at top speed continuously in two complete shifts, day and night. Every window was shuttered or heavily curtained, and all doors had to be protected by blankets used as drop curtains. Tent flaps were all closed at night. Stretcher bearers had to find their way from hut to hut without lanterns. All transportation was without lights. Fritz could pick up the direct rays of a single candle. So it can be seen how important was the matter of lights. In spite of this it required constant vigilance to prevent thoughtless or

careless persons from showing a light. Someone was always forgetting a curtain or a tent flap, and getting a call-down for it. I remember one night a little after 7:00 o'clock I had gone off duty from the operating room and had just reached my hut when I heard the intermittent hum of a German plane coming our way. Almost immediately Fritz shut off his motor. This was always an anxious time because, as he was coasting and made no sound, you could not locate him. We located this one soon enough, however, because he began dropping his bombs. The bombing planes usually carried four and naturally every one counted them as they fell. We had very little trouble about lights for several nights after that.

One of the special stunts in the setting up exercises that all of us took while in training was to take a deep inspiration, hold one's breath and after an interval blow it out again. Whoever was directing the exercise gave the order "inhale" and then counted a certain number and gave the order "exhale." One night a Boche plane was dropping his four bombs near some American soldiers and every one was holding his breath and counting them. When the last one exploded one of the men put his head outside his hut and yelled out "exhale."

I had expected to see a great quantity of abandoned material along the roads leading up to the front. The French system of salvage was very successful and had rather an irritating effect on wasteful Americans. If a truck broke down it was soon repaired or towed in; if an aeroplane fell or came down disabled, big flat trucks soon had it loaded and on its way to the aerodrome. This applied to everything of any value, however small. They look upon trees almost as sacred things and to fell a tree without authority was an act of vandalism. Although the Americans wiped out the St. Mihiel salient the French Salvage Corps went over the country. We got our stores from German dugouts in this sector and had several "conversations" with the French while getting them. But we got them. Before this war began I had always considered myself an honest man.

Toulson, who spent a year with the British, says that they were very adept in the matter of salvage. Practically every man coming back from the front would bring something along. Money prizes were given to that Battalion in the Division whose members salvaged the greater amount. Officers and men took part in this. In the aggregate, it meant a tremendous saving.

American troops were as unlike this as it was possible to be. They practised wastefulness to the utmost. It was just a part of our national extravagance.

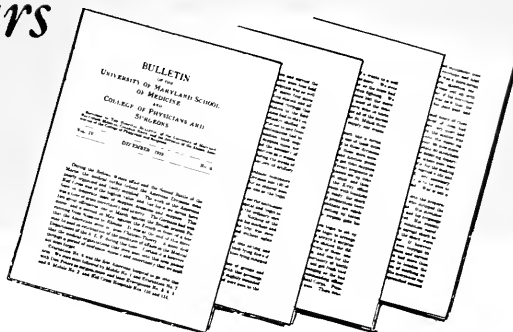
Another very noticeable thing was the respect shown by the French troops for the rights of property. This was especially seen in their treatment of the standing wheat. Along the actual front there was no regard for any life, but in the areas just back of the front it was a rare thing to see any trampling of wheat. We got up in the Marne country in early June. The wheat was just beginning to head and this was the very heart of the French wheat country. We remained there until after the wheat was harvested and housed, and during this time many thousand of troops were billeted near us and all sorts of transportation filled the road. Troops and artillery were bivouacking all over the place, but always in areas especially set aside or along the roads. Every house in every village was plainly marked as to the number of soldiers who could be billeted there, and every stable and shed as to the number of horses, but the growing crops were scrupulously spared. "Spare the wheat" was a slogan. This was not the least of the reasons for the failure of the submarine. "Thrift, thy name is France." In any sort of fair competition, as to area, climate and natural resources, we would be left at the post.

An interesting thing was the system of signs seen all over northern and northeastern France. All roads were plainly marked, both for direction and distance. At first the language was only French, later the Americans set up many signs also. It was necessary to ask few questions. By simply keeping one's eyes open you could find your way to the next town, or the main place in that community, to the railroad station, to the aerodrome, the dump, any headquarters that might be in the neighborhood, any nearby hospital and in addition to this there were all sorts of propaganda constantly taught by signs. Everywhere you were warned not to talk because of spies. After the advance against the

Germans began in July, it was quite the style to show some sign in the German language. Trucks, ambulances, and gun caissons were decorated with all sorts of German signs and the names of places and advice thereon were often laughable. During the Argonne offensive I remember at a cross roads near Dead Man's Hill, where there once had been a town, a sign with a hand pointing toward the front and printed thereon—"To New York via Berlin."

All this fought over country is one huge grave-yard. Men who were killed in action were buried where they fell unless troops were occupying the trenches. There were no well-organized trench systems used after the Second Battle of the Marne, because the warfare had become mobile for the first time since the autumn of 1914. Every hospital had its cemetery. There was a group of barracks in the outskirts of Verdun that had been a hospital since the beginning of the War. Its cemetery covered several acres. The French mobile unit beside us had a cemetery of many hundreds. Many of them were Mohammedans. They were sleeping peacefully together—Frenchmen and Colonial—for all their difference in creed. While going to Metz, we passed through some of the famous battle-fields of the Franco-Prussian War and there were many graves bearing the simple inscription, "Here rests a warrior." Around Coincy and Fère-en-Tardenois, we saw many fresh German graves scattered over the fields. There was a cross at the head and often a soldier's helmet hanging on the cross. Almost the first thing I saw at our first station were the bodies of sixteen American dead awaiting the burial detail. Taps, blown across the graves of men who had made the supreme sacrifice, is the saddest sound I have ever heard. For the most part the men went to their death with the same quiet courage that they went into battle. We saw a great deal of the dead and dying and I shall never lose my faith in men. Underneath all the carelessness and folly there is something very fine.

Pages from the Bulletin of yesteryears



BULLETIN OF THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE AND COLLEGE OF PHYSICIANS AND SURGEONS

Successor to THE HOSPITAL BULLETIN, of the University of Maryland,
BALTIMORE MEDICAL COLLEGE NEWS, and the JOURNAL of the Alumni Asso-
ciation of the College of Physicians and Surgeons.

VOL. V OCTOBER, 1920 NO. 3

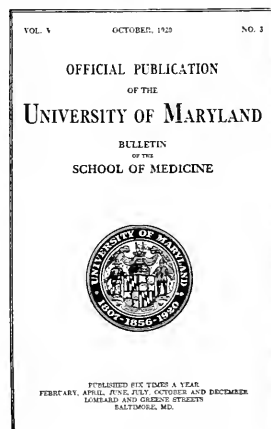
THE UNIVERSITY OF MARYLAND: ITS ORGANIZATION AND RE-ORGANIZATION

By GORDON WILSON, M.D.

There have been founded at various times 439 medical schools in the United States, the largest number in existence at one time being in 1906 when there were 162, and, at the present time, only 60 are in existence which give a satisfactory medical education. The University of Maryland is one of these 60, and the fourth oldest, Pennsylvania having been founded in 1765, Harvard in 1782, Columbia and the University of Maryland in 1807. It should be a matter of interest to Marylanders, that the first doctor ever graduated in the new world was the Marylander, John Archer, who graduated in 1768.

Since 1807 the University of Maryland has had a continued and honored career, graduating a class each and every year since 1810. It was originally organized in 1807, the present charter being granted in 1812, a charter which has been held by the Supreme Court of the United States to be a contract between the State and the University, and, therefore, irrevocable and unamendable by the State without the consent of the Regents of the University of Maryland. The Board of Regents created by the original charter was a self-perpetuating group of professors in the school having no property

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The First Reorganization
Beginning in 1920 negotiations to merge the then proprietary type medical school with the new State University were begun. At this time there were a number of independent schools bearing the name of University of Maryland (Medicine, Law, Dentistry). The Maryland Agricultural College (M.A.C.) was located at College Park. A plan was proposed to merge a number of schools, thus creating under one management a state university to be known as "The University of Maryland. There were pros and cons. There were professional and legislative debates, culminating in the organization of the University of Maryland and its School of Medicine as we now know it.

rights in the school property, but having the right to pay themselves salaries out of the fees of the students in excess of the amounts required to conduct the school. The property of the University has at all times been handled by the Regents as a trust, the State, under the charter, having the reversionary right to such property should the University cease to function.

This type of medical school was the accepted type in the early part of the nineteenth century, the true State University developed at a later period and chiefly in the West. The third type of medical school is the privately conducted institution with large endowments and an independent self-perpetuating Board of Trustees, like Harvard and Yale.

Up to about 1880 the expenses of conducting a medical school were extremely small, as it was only at that time and afterwards that the laboratory and scientific sides of medical education became important with the resulting need of expensive laboratories and equipment, and the paying of "living salaries" to the professors of the scientific branches who could not add to their incomes through the practice of their profession.

This change in medical education sounded the death knell to all medical schools other than those support by rich endowment or by the State through taxation, and as a direct result of it, the Baltimore Medical College was merged with the University of Maryland in 1913, and in 1915 the College of Physicians and Surgeons and University of Maryland formed a merger. These mergers made no change in the organization, but only added additional members to the Board of Regents.

The need of re-organization was early recognized by certain far visioned members of the Board of Regents, the governing body of the University, and the agitation then began for an independent Board of Trustees and private endowment or State control. With the increasing cost of medical education, the fees from students with difficulty supported the running of the laboratories, and as a result of it there was no excess to be divided amongst the Faculty as salaries, the last year in which the Faculty as a body received salaries being 1911, since when salaries have only been paid to those whose work was confined to teaching the laboratory branches, and during the past year, out of the twenty-two members of the Faculty only three received any money from the school, directly or indirectly, namely, the Dean, and the Professors of Bacteriology and Pathology.

Owing to the fact that the charter had been held by the Supreme Court in the Dartmouth case to be a contract, and the further fact that this question had been decided the same way with reference to the University of Maryland charter by the Maryland Court of Appeals, made it impossible for the Legislature to amend this charter without the consent of the Board of Regents, possibly all of them and certainly a majority of them being required to assent to any amendment to make it valid. It must further be remembered that while the Board of Regents consisted of almost all the members of the Faculty of Physic, yet it had as members also professors from the Schools of Law, Pharmacy and Dentistry, schools in which the student fees still sufficed to pay not only the expenses of conducting the schools, but left a margin which was divided amongst the professors in lieu of salary.

Finally the need of re-organization was seen by all, and during the past session of the Legislature of Maryland a bill was enacted merging the old University of Maryland with the Maryland State College of Agriculture under the title of the University of Maryland, but under the charter of the Maryland State College of Agriculture as far as organization was concerned. The charter of the Maryland State College of Agriculture which was granted in 1916 (at which time the State assumed absolute ownership and control of that Institution) was modeled after the plan of the State University charters considered by educators to be the ideal for State Educational institutions. This charter provides for a governing body consisting of nine trustees, one of whom shall be appointed by the governor each year to serve a period of nine years, thus checking as far as possible the entrance of pernicious politics, as no Governor would probably be able to obtain control of the Board by his appointments, certainly not before his own term of office (four years) was about to expire. Under this charter the Board of Trustees appoints the President of the Institution, creates departments and the positions in these departments, fixes the salaries of these positions and assigns the funds as appropriated by the Legislature. This board, however, does *not* fill any of the positions created by it, that power being left absolutely in the hands of the President and requiring the confirmation of his appointments only in the case of two directors. Thus another check is added to prevent the use of political pressure to create positions or in the filling of them.

The rights and privileges accruing under both charters are reserved to the new University of Maryland, and this charter has been accepted by the former Board of Regents, and has thus become the present charter.

The Faculty of Physic of the University of Maryland enthusiastically accepted the new charter, and showed their acceptance of it, not only in the letter but in the spirit by adopting unanimously the following:

We, the undersigned, professors and members of the Faculty of Physic of the University of Maryland and College of Physicians and Surgeons, believing that the organization of the Medical Department of the new University of Maryland is most important, and having complete confidence in the ability of our new President, Dr. Woods, to carry out such organization, do herewith tender him our resignations, individually and collectively, as professors and as members of the Faculty, for his acceptance at such time as he deems fit.

We further promise Dr. Woods our heartiest co-operation in such organization, and will loyally carry out our work.

A word about the finances may help in understanding the past and present organization.

There has never been any stock owned, authorized or issued at any time by the University of Maryland.

There has been, however, issued at different times three bond issues totaling \$245,000, each issue maturing after forty years.

The first bond issue was in 1896 for \$70,000, secured by a mortgage on the University Hospital, which is owned outright by the University of Maryland, it having no separate corporate existence. The interest and sinking fund charges on this issue amounts to \$5,000 a year which is paid out of the funds of the University of Maryland and *not* from the receipts of the Hospital.

The second issue of bonds was in 1899 and was for \$100,000, and was secured by a mortgage on the land and building at the Northwest corner of Calvert and Saratoga Streets, adjoining the Mercy Hospital. The interest and sinking fund charges on this bond issue amounts to \$6,000 a year, and is paid out of the funds of the University of Maryland.

The third issue was in 1903, and was for the sum of \$75,000 and was secured by a mortgage on the land at the Northeast corner of Lombard and Greene Streets and the building used by the Dental and Pharmacy Departments, and containing certain laboratories of the Medical Department. The interest and sinking fund charges

on this issue amounts to \$4550 annually, and is met out of the receipts of the Medical, Dental and Pharmacy Departments.

All of the above named bonds were sold by the Mercantile Trust and Deposit Company as Trustee to the public, and the proceeds of the sale were used in the construction of the buildings named. The sinking fund provision of these bonds provides for their complete payment at or prior to maturity, and at the present time more than \$89,000 is in the sinking fund in the form of paid off bonds or cash.

The lands and buildings of the University of Maryland at Lombard and Greene Streets and adjoining the Mercy Hospital were estimated in 1916 to have a value of over \$850,000 and since that date all real property in Baltimore has increased in value, in some localities more than doubling in value.

An Endowment Fund Trust was created by the Legislature in 1903 with an independent Board of Trustees, of whom at present the Chairman is Judge Stockbridge. The fund under the control of this Board now amounts to over \$61,000 and its capital and interest have never been touched save for scholarships established by certain donors to the fund.

In 1914 the Legislature appropriated \$15,000 a year to the University for medical education, the amount being increased to \$25,000 in 1916 and in 1920 increased to \$42,500.

It must be remembered that while the old organization of the Medical School is today recognized as having been bad in that it made the employer and the employee one and the same, and created a feeling of personal ownership rather than a feeling of trusteeship on the part of the professors, yet at the time of its creation, it was the accepted ideal, differing from similar schools founded at that period in that the professors had no proprietary or stock right in the assets of the Institution, such assets belonging to the State and reverting to the State should the University cease to function as an institution of learning. It is to the credit of the Regents of the Medical Department of the University in past times that they dreamed of a great institution of learning, and instead of dividing amongst themselves all excess fees as they could have done legally and properly, they bought the other two corners at Lombard and Greene Streets, opposite the school building and opposite the hospital and other properties in the neighborhood so that sites would be owned and controlled when the necessary funds could be gotten to build the University of their dreams.

THE REORGANIZATION OF THE
MEDICAL SCHOOL OF THE
UNIVERSITY OF MARYLAND

By A. F. Woods

President of the University of Maryland

Dr. Gordon Wilson in a recent article entitled "The University of Maryland, Its Organization and Reorganization," published in the last number of this BULLETIN has presented an excellent brief sketch of the history of the medical department of this institution, and in this number he has an article on the present needs of the medical school as seen by one who has worked many years in this institution and has been especially interested in medical education.

The combined charters give the Regents of the University ample power to develop the whole institution along the most approved lines to meet the higher educational needs of the State and to perform the functions delegated by the United States to the "land grant" colleges and universities. The University thus becomes not only a state agency but a national agency for higher education, educational extension and research.

The reorganization of the Maryland Agricultural College under the charter of 1916 was carried out under the charter provisions on a University basis.

The educational units of the College Park Group are the College of Agriculture, the College of Engineering, the School of Liberal Arts, the School of Education, the School of Chemistry, the School of Home Economics, the Graduate School, the Summer School for Teachers, the Department of Military Science and Tactics, the Department of Physical Education and Recreation, the Agricultural Experiment Station, the Engineering Experiment Station, the University Extension Service.

There are also closely associated with these branches the State Horticultural Department, the State Fertilizer Control Work, the Live Stock Sanitary Service and other branches of work under the State Board of Agriculture.

All agricultural control work in the state is centered in the Board of Agriculture which by law is the same as the Board of Regents of the Maryland State College of Agriculture, now the Board of Regents of the University of Maryland.

While the regulatory and administrative work is as a rule organized separately, there is the

closest coöperation with the corresponding branches in the Colleges, Experiment Station and Extension Service. In this general reorganization and enlargement the best university educational standards have been adhered to. The departments have been headed by the very best men obtained in the United States, and so far as the reorganization has progressed in the different departments we have been successful in securing men recognized everywhere as leaders in their fields, the faculties containing men from Harvard, Yale, Johns Hopkins, Cornell, Columbia and the Universities of Chicago, Wisconsin, Minnesota, Michigan, Ohio, Missouri, Nebraska and other of the leading educational institutions of the United States.

The requirements for entrance and graduation in the reorganized schools are essentially the same as those of the institutions above mentioned.

The same general procedure followed in the reorganization of the College at College Park will be followed in the reorganization of the Colleges of the University of Maryland at Baltimore, *viz.*: Medicine, Law, Dentistry and Pharmacy.

The articulation of the work in these schools with the schools at College Park is being satisfactorily accomplished. Standard pre-medical courses, and courses in arts and science are available in the Arts and Science Schools at College Park for those desiring to prepare for the Medical College. Scientific specialists in the College Park laboratories and departments are available for special work in the laboratories in Baltimore. Most of the work of the preclinical years is available on both campuses. The laboratories will be developed, equipped and manned for thorough teaching and research with a corps of the best full time men available and such part time men as are needed for efficient work. The aim in all departments is to bring in the best men from the best universities to get the inspiration and larger university viewpoint that comes from such association, and to avoid the ill effects of too much "inbreeding."

The clinical departments also will be headed eventually by the best men available on at least a "part time" salary basis. This should make the places attractive to the very best type of men. Such additional part and full time men as are necessary to accomplish the best work will make up the staff of each department.

Fitness for the work will be the only consideration that will weigh in these appointments, which will be made by the President after conference with the deans and heads of departments.

A short time prior to the United States becoming a participant in the World War the Faculty of Physic of the University of Maryland unanimously recommended that the department of internal medicine be reorganized and placed under the charge of a well paid, properly trained internist who should devote four hours every day to teaching and hospital work. They further recommended that the sub-departments of internal medicine should be under the charge of the professor of medicine, and that he should be entirely responsible for the arrangement and direction of all medical teaching, and that he should have the power to recommend all appointments, promotions and removals, that the free wards of all hospitals should be under his control as far as concerned medical patients, that he should have charge of the medical dispensaries and the use of this material for teaching purposes with the power also to appoint and displace those working in the medical branches of the dispensary. He was also to have the power of appointing all medical interns and could suspend or discharge them with the approval of the Faculty, and the further power was given him of finally grading all students in the Department of Medicine, subject to the approval of the Faculty.

On account of the above recommendation, which I endorse most heartily, I deemed that this department should be reorganized at once as no further study was required, and it was only necessary to obtain the funds to carry out the reorganization and to find the proper man who should head this department. After the department of Internal Medicine has been reorganized, the other departments of the school will be carefully studied and reorganized as found necessary.

Everyone connected with the medical school is planning and working with the single aim of making it in every way a school of the very highest standards, and one that will render the largest possible service to the state. In order to leave the largest freedom to the Board of Regents and the President, all of the members of the faculty voluntarily tendered their resignations to take effect at such time as the President and the Board might think best, and at the same time these unselfish workers, who have already given so many years of service to the institution, offered to continue to carry the burden until such time in the future as the Board and the President could work out the reorganization. The work at present is being conducted under this arrangement.

Such appointments as are now possible are

of course tentative with a view to working out the policies above mentioned and until funds can be secured for permanent reorganization.

I wish here, on behalf of the Board of Regents and myself, to express our appreciation to the officers and faculties of all the schools and colleges of the University for their cordial coöperation and readiness to aid the reorganization in every way. Their unselfish devotion to the work of the University deserves the warmest commendation. This applies with special force to the Medical School.

The state and the nation have pressing need for thoroughly trained physicians and nurses, and it requires no prophetic eye to see that this need in rural communities for medical service in its broadest sense must be met in the future through the state universities.

The Medical School of the University of Maryland for more than one hundred years has contributed its share to this great work of preventing, controlling and curing disease and suffering. It now faces a future of even greater usefulness as a strong arm of the state, working patiently and efficiently to protect its citizens.

IS IT BETTER FOR THE STATE AND COUNTRY THAT THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE LIVE OR DIE?

BY GORDON WILSON, M.D.

From the standpoint of the public, the primary object of a medical school is to educate properly qualified men and women to become practitioners of medicine, and, secondarily, in this education to prepare them for further study leading to their becoming teachers, research workers, consultants, and specialists.

It is practically the unanimous opinion of those who have carefully studied the medical educational conditions in this country that we today are graduating too few *properly trained* practitioners of medicine, have too few medical colleges with proper equipment and sufficient funds, and these are limited as to the number of students they can accept, as shown by the fact that the Hopkins in 1919 turned away 123, and in 1920, 108 qualified entrants for the Freshman class, and finally the schools graduating the largest percentage of practitioners in the rural districts are those schools which must either add to their equipment and funds, or cease to exist.

Accepting the above as true, is it for the benefit of the country at large that the University of Maryland Medical School should live or die?

There is no question in the minds of anyone

that the University of Maryland Medical School must have additional funds and equipment if properly trained practitioners of medicine are to be graduated by it, and therefore the question resolves itself down to the simple facts, can it be made first-class, and is it worth while, and we can only rightly decide the question by studying frankly this medical school from the standpoint of what it has done, what it is doing, how it *has been* organized, how it *is* organized, what is its physical equipment, what is its value as "a going concern," and what is its worth to the community and the size of that community.

In "The University of Maryland, its Organization and Re-Organization," published in the previous number of this BULLETIN, a brief history of the University is given, including its former organization and present organization, and to briefly summarize, it is shown that this College has been in continuous existence for over one hundred years, and that while its original organization was bad, the present one can well be considered ideal for a state owned and controlled institution. As the value of an organization depends so much upon its personnel, appendix "A" has been added to show the names of the President, Dr. A. F. Woods (formerly the Dean of the School of Agriculture of the University of Minnesota and acting President of the University when Dr. Vincent was away), and also the Board of Trustees (one of whom is President Goodnow of the Hopkins), with the dates of the expiration of their terms of office.

Appendix "B" shows in a table the students in 1918-19 from eleven near-by states matriculated at the Johns Hopkins Medical School and at the University of Maryland, and demonstrates quite clearly that both institutions fill a need that is not local. In the third column, in brackets is given the number of physicians in these states who have been graduated by the University of Maryland, and shows that even in the past this institution filled more than a local need and was especially valuable to the states South of it.

In appendix "C" is given a list of the "Class A" medical schools in the United States (1918-1919) that had matriculates from twenty-three or more states and from foreign countries, the University of Maryland being one of these, and there being only fourteen having so broad a matriculate in the eighty-nine cited by the *Journal of the American Medical Association*. This same table includes all the medical schools having in 1918-19, 235 or more students, the number matriculated at the University of Mary-

land that year. Out of the 89 colleges only 18 have this number of students or more.

In "Medical Education With Reference To Rural Communities," the tables on pages 5 and 6 (appendices "D" and "E") show only four graduates of the Hopkins (in its eighteen years of existence, 1896-1914) practicing medicine in rural Maryland as compared with one hundred and forty from the University of Maryland in the same period. This proves conclusively that the University of Maryland is meeting a need for rural practitioners that is not met by the Johns Hopkins Medical School, an institution which is filling a want in its output of splendid teachers, research workers and specialists (see article by Bardeen in *Science*, March 17, 1916).

The value of the University as a "going concern" must be judged by its output, first the quality and second the quantity, especially during the past few years. While appendix "C" shows this to a degree, the quality can be shown by the standing of its graduates in State Board examinations, especially so since these graduates went before so many different boards. A personal judgment, when unbiased, by a competent authority is always of value, and Dr. Nellis B. Foster, formerly Professor of Medicine at the University of Michigan, and later Chief of the Medical Service at the United States Base Hospital, at Camp Meade, had under him, during his War service, recent graduates of many institutions, including some from the University of Maryland, and in a personal letter to the writer said as follows:

Of course an opinion is only an impression, although it was founded upon very intimate contact, a much more intimate contact than is possible in civil hospitals since we lived together, and I think I know all of the men down to the finest refinements of their intellectual processes. From a practical point of view, by which I mean correctness in diagnosis, resourcefulness in application of therapeutic methods and general interest displayed by hard work, the graduates of Maryland were fully up to the average of any other school. They also disclosed in many instances an interest in the scientific aspect of medicine and a spirit, which I may call research, which I had not expected.

The physical equipment for teaching purposes at the University of Maryland consists of a modern general hospital, the University Hospital with 156 ward beds, and has an excellent X-ray laboratory, and fairly good clinical laboratories. This hospital, however, does lack sufficient beds in its children's and maternity departments for the proper teaching of these

specialties at the bedside. This hospital is absolutely and entirely owned by the University of Maryland which assures for all time its use in teaching. In addition to the above the Mercy Hospital, with 148 ward beds, owned by the Sisters of Mercy is under perpetual contract to the University of Maryland, to allow its use by the University as a teaching hospital, and its resident staff under this contract is appointed by the Faculty of the University of Maryland, as well as its visiting staff, all of whom are members of the teaching staff of the University of Maryland. Adjoining this hospital is a large building owned by the University of Maryland containing laboratories, amphitheatres, lecture rooms, and dispensary rooms. The value of this building and land on which it stands is more than \$100,000. The other buildings owned by the University of Maryland contain laboratories, lecture rooms and amphitheatres and administration offices, and in addition to the above, land has been bought in the past which has on it at present dwelling houses, this land being held for future improvements, and is adjacent to the University Hospital and School Buildings. The value of the real estate is well above \$850,000.

In the past this institution was neither owned nor controlled by the state as in the case now, but in 1916 was aided by a state grant of \$15,000 a year, increased in 1918 to \$25,000 a year, and last year increased to \$42,500 a year, this last grant being made prior to the state assuming ownership and control in an act which was passed unanimously and without amendment by both houses of the state legislature, and would thus indicate a clear understanding by the people's representatives of the value of this institution to the state, and certainly promises for the future funds for its support to the limit of the state's ability, its ability, however, being limited since Maryland is not a wealthy state.

The immediate needs of the University of Maryland Medical School which can be met by funds are:

First, an annual income sufficient to increase the present low salaries paid to the teachers in the laboratory branches, and to their assistants;

Second, for salaries to the heads of the clinical departments for full "half-time" work, thus requiring the attendance of these heads daily for four hours of continuous work in teaching and hospital work;

Third, living salaries for first and second assistants in these clinical departments for "whole-time" service.

Unless such funds are obtained it will be absolutely impossible to obtain the proper type of men to head and to man these departments.

The greatest need in physical equipment at present is:

(1) A large building, the two lower floors to be used for "out-patient" departments with the necessary teaching rooms adjacent, and the upper floors for the badly needed modern laboratories. The present "out-patient" departments are housed in the basement of the University Hospital, below the level of the street, and in poorly lighted and ventilated rooms.

(2) A large building to be used as a hospital for maternity cases, and for children, both departments being necessary for the proper teaching of these two specialties. By the building of the last named maternity and children's hospital, the present wards now used in the University Hospital for these two departments could be utilized in improving the laboratory facilities and adding needed beds for free patients, invaluable as clinical material in the modern method of small group bedside teaching.

This institution, appreciating the need of these two buildings, endeavored to raise, in October, by popular subscription the funds necessary for the construction of these buildings, and a Nurses' Home, but were only able to raise a net sum of about \$150,000, hardly sufficient to build the Nurses' Home, the nurses now being lodged in three partly remodeled old residences of cheap construction.

In considering the potential value of a medical school one must think of the section which it supplies with physicians and the need of that section, and therefore the location is important, and the University of Maryland is and has always been a Southern institution, its students frequently in the past coming to this institution because their fathers and grand-fathers before them had graduated there. While it is a fact that a good medical school can exist and obtain clinical material in a small community, it is undoubtedly an advantage to a medical school to be located in a large center of population, and today Baltimore is the center of this character preeminently for the states south of Mason and Dixon's line and east of the Alleghenies, and in these six states (including West Virginia) south of Maryland there are only five "Class A" medical schools offering a full four year course, a smaller average of schools for this group than for the country at large which has 60 "Class A" schools giving the full four year course.

BULLETIN OF THE SCHOOL OF MEDICINE, UNIVERSITY OF MARYLAND

APPENDIX A

President

Dr. A. F. Woods, formerly of the University of Minnesota
Board of Regents

NAME	OCCUPATION	ADDRESS	TERM EXPIRES
S. M. Shoemaker, Ch. Board of Regents.....	Farmer	Eccleston	1925
Chas. C. Gelder.....	Farmer	Princess Anne	1929
W. A. Skinner.....	Chemist	Kensington	1928
B. John Black.....	Farmer	Roslyn	1927
Henry Holzapfel.....	Capitalist	Hagerstown	1926
Robert Crane.....	Farmer	North Victoria	1924
John M. Dennis.....	Capitalist	Lutherville	1923
Frank J. Goodnow.....	Educator	Baltimore	1922
John E. Raine.....	Publisher	Towson	1921

APPENDIX B

MEDICAL STUDENTS FROM FOLLOWING STATES (1919)	J. H. M. S.	UNIVERSITY OF MARYLAND	
Maryland.....	60	80	(1309)
Virginia.....	24	13	(334)
West Virginia.....	5	23	(433)
North Carolina.....	13	20	(557)
South Carolina.....	6	5	(185)
Georgia.....	15	1	(125)
Florida.....	2	2	(83)
Tennessee.....	12	0	(42)
Pennsylvania.....	26	14	(627)
Delaware.....	1	4	(30)
New Jersey.....	9	9	(191)
Total.....	173	171	(2607)

(Numbers in parentheses are residents of these states, graduated from University of Maryland.)

Medical Students from Maryland at all other medical schools than those in Maryland, 35.

APPENDIX C

COLLEGE	STATE	NUMBER STATES REPRESENTED	NUMBER STUDENTS FROM COLONIES	NUMBER STUDENTS FROM FOREIGN COUNTRIES	NUMBER STUDENTS IN 1918-19
Loyola.....	Illinois	26	16	6	271
Northwestern.....	Illinois	32	1	5	294
Rush.....	Illinois	31	4	8	633
University of Illinois.....	Illinois	23	3	4	264
University of Louisville.....	Kentucky	28	0	0	99
Tulane.....	Louisiana	22	7	0	275
Hopkins.....	Maryland	39	1	7	374
University of Maryland.....	Maryland	23	15	7	235
Harvard.....	Massachusetts	36	1	18	399
Tufts.....	Massachusetts	14	3	6	358
University of Michigan.....	Michigan	35	0	10	361
University of Minnesota.....	Minnesota	17	0	3	286
Kansas City University Physicians and Surgeons.....	Missouri	25	0	4	136
St. Louis University.....	Missouri	23	1	4	253
Columbia.....	New York	32	1	8	526
Fordham.....	New York	7	0	0	243
Long Island.....	New York	7	0	4	370
Bellevue.....	New York	20	1	1	403
Jefferson.....	Pennsylvania	37	0	20	451
University of Pennsylvania.....	Pennsylvania	38	3	11	467

Only 13 of the 60 "Class A" schools had in 1918-19 students from at least 23 states and from colonies and foreign countries.

Only 18 had 233 or more students matriculated that year.

APPENDIX D

TABLE 1

Physicians practicing in rural Maryland (1914)

COUNTIES OF MARYLAND	GRADUATES OF				
	University of Maryland School of Medicine	College of Physicians and Surgeons	Baltimore Medical College	Johns Hopkins Medical School	All other medical colleges in United States
Allegany.....	10	5	1	0	13
Anne Arundel.....	23	4	2	1	13
Baltimore.....	63	13	10	0	18
Calvert.....	4	5	1	0	1
Caroline.....	12	5	1	0	4
Cecil.....	11	3	3	0	14
Carroll.....	32	4	3	1	12
Charles.....	8	2	2	0	1
Dorchester.....	12	4	5	0	7
Frederick.....	32	2	6	0	13
Garrett.....	9	0	0	0	6
Harford.....	23	3	0	0	9
Howard.....	10	4	1	0	4
Kent.....	5	3	4	0	11
Montgomery.....	15	4	2	0	16
Prince Georges.....	13	9	2	0	21
Queen Annes.....	7	3	2	0	6
St. Marys.....	11	2	1	0	6
Somerset.....	11	1	2	1	9
Talbot.....	15	2	2	1	4
Washington.....	8	3	6	0	17
Wicomico.....	8	3	2	0	9
Worcester.....	8	4	1	0	12
Total.....	350	88	59	4	226

Physicians in rural Maryland, 727.

Ratio to population (709,000), 1:975.

Graduates of what is now the University of Maryland School of Medicine and College of Physicians and Surgeons in rural Maryland, 497.

Number of doctors graduated from Johns Hopkins from 1897 to 1913, inclusive, is 965, of whom four have settled in rural Maryland.

Graduates of all other medical schools in rural Maryland, 226.

APPENDIX E

TABLE 2

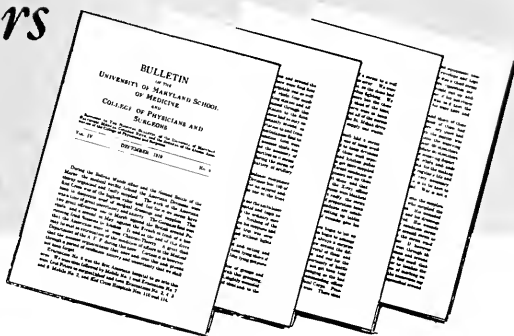
Physicians in rural Maryland (1914)
Graduated since 1896

COUNTIES OF MARYLAND	GRADUATES OF				
	University of Maryland School of Medicine	College of Physicians and Surgeons	Baltimore Medical College	Johns Hopkins Medical School	All other medical colleges in United States
Allegany.....	3	0	0	0	4
Anne Arundel.....	12	2	1	1	6
Baltimore.....	23	3	7	0	11
Calvert.....	2	1	1	0	1
Caroline.....	7	1	0	0	1
Cecil.....	7	1	1	0	3
Carroll.....	11	0	1	1	5
Charles.....	4	0	1	0	1
Dorchester.....	8	2	1	0	4
Frederick.....	13	0	5	0	5
Garrett.....	5	0	0	0	5
Harford.....	9	1	0	0	4
Howard.....	4	2	1	0	0
Kent.....	0	2	2	0	3
Montgomery.....	4	1	0	0	8
Prince Georges.....	5	1	0	0	9
Queen Annes.....	4	1	2	0	0
St. Marys.....	1	0	1	0	3
Somerset.....	5	0	1	1	4
Talbot.....	5	1	1	1	2
Washington.....	0	1	3	0	4
Wicomico.....	4	0	2	0	8
Worcester.....	4	3	0	0	6
Total.....	140	24	31	4	97

Hopkins graduates (1897-1913).....	965; in rural Maryland.....	4
U. of M. graduates (1897-1913).....	1,225; in rural Maryland.....	140
P. & S. graduates (1897-1913).....	1,029; in rural Maryland.....	24
B. M. C. graduates (1897-1913).....	1,330; in rural Maryland.....	31

Graduates: U. of M., P. & S., B. M. C. (combined).....	1905	1915
Freshmen: U. of M., P. & S., B. M. C. (combined).....	249	128
	263	44

Pages from the Bulletin of yesteryears



UNIVERSITY OF MARYLAND BULLETIN OF THE SCHOOL OF MEDICINE

VOL. VII.

JANUARY, 1923.

No. 3

REORGANIZATION OF THE UNIVERSITY HOSPITAL.

By A. F. Woods,

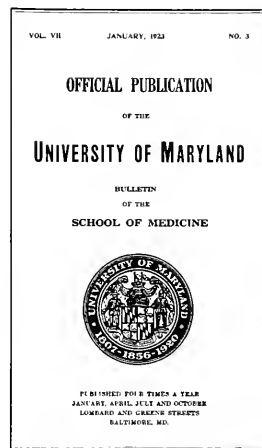
President of the University of Maryland.

No medical college can do satisfactory teaching without the aid of a modern and well equipped hospital conducted for the specific purpose of the educational work. The University Hospital has long served this purpose for the Medical School of the University of Maryland.

The need for greater hospital facilities is pressing and as already pointed out by Gordon Wilson in the Bulletin, Vol. V, No. 3, October, 1920, an effort has been made to raise the funds necessary for this purpose. Only enough was secured to build a part of the Nurses' Home. This is now completed and constitutes the first unit of the new plant. It is fireproof and modern in every respect. The Training School for Nurses bears a close relation to the Hospital. The lack of modern facilities adds greatly to the difficulties, as well as to the cost of maintaining the Hospital.

There is urgent need for an adequate fireproof hospital, with laboratories and out-patient departments. General plans for these are under consideration and it is hoped that the State may provide for them in the near future.

The general plan and policies to be followed in the reorganization under the Consolidation Act was presented in the Bulletin in articles prepared at my request by Gordon Wilson, Vol. V, No. 4, December, 1920, and in a brief article I wrote for the same number. The larger features of the reorganization were, of course,



accomplished by the terms of the Act itself. This provided that all property rights and control should pass to the State of Maryland and that the Board of Trustees of the Maryland State College should become the Board of Regents of the University of Maryland, with all the powers granted by both charters.

When this Act was passed the Board of Trustees, now the Board of Regents, had already adopted a comprehensive plan of development for the Maryland State College, which included an Agricultural group, an Arts and Science group, an Engineering group, an Education group, and a Home Economics group, each with its appropriate departments and curriculum leading to appropriate degrees. The general building plan had been adopted and appropriations requested and in part granted by the previous Legislature and in part included in the Budget Bill for the first biennium following the consolidation. For the first two years, therefore, that is, up to October 1, 1922, only the original appropriations granted to the old University have been available for the Baltimore Schools. These were sufficient to keep the Medical School in Class A and provided nothing for the Hospital, except part pay for State patients, \$22,500, which . . . fell short of paying the cost . . . by over \$35,000 a year. Nothing was provided for Dentistry, Pharmacy or Law.

An effort was made to secure outside aid from sources that we had good reason to believe would help, at least in the Medical group, but this came to nothing. A general appeal to the public was out of the question, owing to the general financial conditions and the numerous drives that had exhausted the supplies available from such sources. It became necessary, therefore, to operate the institution on the small appropriation available from the State and the usual fees and the donations received through the Women's Auxiliary.

A careful audit of the books showed that the Medical School and Hospital had large cash deficits amounting to about \$40,000 each, due, in the case of the Medical School, largely to the purchase of real estate needed by the University, and in the case of the Hospital, to the excess in cost of State patients over the amount appropriated. In both cases, also, the cost of maintenance was and still is excessive owing to inadequate equipment. The cost of nursing has been especially high, due to the fact that student nurses were unwilling to accept the living conditions which were so unsatisfactory that we could not wait for the completion of the new

Nurses' Home, but had to better them from hospital receipts. Nurses had to be hired to make up the lack of student nurses and the compensation to student nurses had to be largely increased. Some urgent repairs and new equipment had to be provided or close the Hospital. The money for these things has been secured only through the strictest business management and . . . in . . . some cases economies that could not be considered good business management.

I know that in doing this we have made some mistakes, but these are inevitable in such a process. All have done the best they could under the circumstances. Much that is still urgently needed cannot be undertaken because of lack of funds. An effort was made at the last session of the Legislature to secure additional appropriations to meet these most urgent needs of the University. The recommendations of the Governor in his Budget were cut by the Ways and Means, and Finance Committees, but nevertheless substantial progress has been made, in that the Senators and Representatives generally have a better knowledge of and, therefore, greater interest in the work the University is doing.

Owing to plans that had been formulated and approved before the consolidation certain buildings at College Park had to be provided. In addition to these, provision was made for the installation of a refrigerating plant in the University Hospital and for the equipment of the new Nurses' Home, as well as for some equipment for Dentistry, and Pharmacy. The latter will be used in fitting up the old church adjoining the Dental and Pharmacy laboratories on the north, which makes it possible to accommodate about fifty additional students in Dentistry.

Of the items allowed in the maintenance budgets the General University appropriation will take care of items amounting to \$35,000 a year for the Hospital, Medical School, Dentistry and Pharmacy. With this aid it is hoped to clear up the \$40,000 deficit in the Hospital during the biennium and reduce the deficit in the Medical School and also provide for . . . Arts and Science subjects in Dentistry and Pharmacy.

Two years from now we hope that all urgent needs of the University will be provided for by the State. There is little doubt that this will be done if the people of the State and the members of the Legislature come to know what the University is doing and can do for them in rendering service urgently needed and not otherwise obtainable. The co-operation of all friends of the University to this end is essential.

So far as funds available will permit, the

general plan of reorganization outlined briefly in the Bulletin, Vol. V, No. 4, December, 1920, is being carried out. It may be of interest to quote from the statements there made:

"Standard pre-medical courses and courses in arts and science are available in the Arts and Science Schools at College Park for those desiring to prepare for the Medical College. Scientific specialists in the College Park laboratories and departments are available for special work in the laboratories in Baltimore. Most of the work of the pre-clinical years is available on both campuses. The laboratories will be developed, equipped and manned for thorough teaching and research, with a corps of the best full-time men available and such part-time men as are needed for efficient work. The aim in all departments is to bring in the best men from the best universities to get the inspiration and larger university viewpoint that comes from such association, and to avoid the ill-effects of too much 'inbreeding.'

"The clinical departments also will be headed eventually by the best men available on at least a 'part-time' basis. This should make the places attractive to the very best type of men. Such additional part and full-time men as are necessary to accomplish the best work will make up the staff of each department.

"Fitness for the work will be the only consideration that will weigh in these appointments, which will be made by the President after conference with the deans and heads of departments.

"A short time prior to the United States becoming a participant in the World War the Faculty of Physic of the University of Maryland unanimously recommended that the department of internal medicine be reorganized and placed under the charge of a well-paid, properly trained internist, who should devote four hours every day to teaching and hospital work. They further recommended that the sub-departments of internal medicine should be under the charge of the professor of medicine, and that he should be entirely responsible for the arrangement and direction of all medical teaching, and that he should have the power to recommend all appointments, promotions and removals, that the free wards of all hospitals should be under his control as far as concerned medical patients, that he should have charge of the medical dispensaries and the use of this material for teaching purposes, with the power also to appoint and displace those working in the medical branches of the dispensary. He was also to have the power of appointing all medical interns and could suspend or discharge them with the ap-

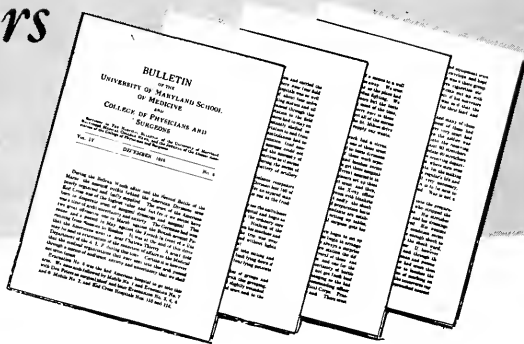
proval of the Faculty, and the further power was given him of finally grading all students in the Department of Medicine, subject to the approval of the Faculty.

"On account of the above recommendation, which I endorse most heartily, I deemed that this department should be reorganized at once, as no further study was required, and it was only necessary to obtain the funds to carry out the reorganization and to find the proper man who should head this department." This has been accomplished.

The organization and management of the Hospital so that it will be most effective in the training of physicians and nurses requires a clear and definite fixing of responsibility on the part of those in charge of the several departments, as well as provisions for the fullest co-operation. This requires, first, a general Superintendent or Director, responsible to the President of the University; a Superintendent or Director of the Nurses' Training School, responsible either directly to the President or through the Dean of the Medical School, for the educational work, and to the Superintendent of the Hospital for the nursing work done in the Hospital. This plan is now in operation. In order, however, that the general policies of the Hospital and Training School may have most careful consideration, it has been thought wise to appoint an advisory council. At my request the Chairman of the Board of Regents, the Dean of the Medical School, the head of the Department of Surgery, and the head of the Department of Medicine have acted as a temporary council. The Superintendent of the Hospital, the Superintendent of Nurses and the Comptroller have attended most of the meetings. It is planned to select two lay members entirely outside the institution and two members nominated by the visiting staff, and also a representative of the Women's Auxiliary. Any suggestions as to a better plan are heartily welcomed. Constructive criticism, as well as commendation, is invited at all times. Only in this way shall we be able to work out a perfect organization.

Such suggestions and criticisms should be made to the responsible officials, such as heads of departments, superintendents, deans or the President. It is unnecessary, of course, to say that criticism of the University to people not responsible for it or to those who are not in a position to correct things that are wrong and those who may be looking for something to find fault with is not constructive and will not be indulged in or encouraged by any friend of the University.

Pages from the Bulletin of yesteryears



UNIVERSITY OF MARYLAND BULLETIN OF THE SCHOOL OF MEDICINE

VOL. IX

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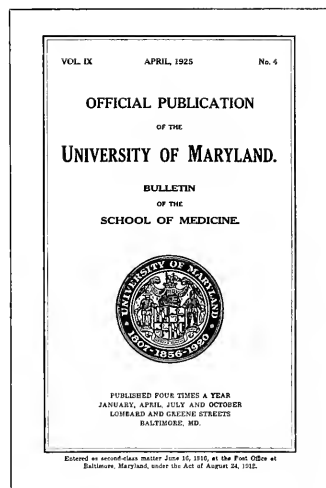
THE SURGICAL AND ANATOMICAL WORKS OF NATHAN RYNO SMITH*

By ALEXIUS MCGLANNAN, M. D.
Baltimore.

In 1825 we find Nathan Ryno Smith in Philadelphia, Professor of Anatomy in the newly founded Jefferson Medical College. The American Medical Review (1825-26), in which he shared honors with his father, is the first fruit of his literary career in that city. The Essay on Digestion had been published in New York earlier in the same year. The Philadelphia Monthly Journal of Medicine and Surgery was founded by N. R. Smith in June, 1827. Like many other journals of the time, it had a short career, but was fortunate to find a resting place the following year in a merger with the American Journal of the Medical Sciences.

In 1829, two years after he came to Baltimore, the translation of Saissy's book on Disease of the Internal Ear was published. To the translation he added an original supplement on Diseases of the External Ear. Thoroughly established in Baltimore, in February, 1830, he brought out the Baltimore Monthly Journal, which lasted one year. In this journal is published the first report of the famous Anterior Splint. (Description of an Apparatus for the Treatment of Fractures of the Thigh and Leg, by Smith's Anterior Splint.) Thirty-seven

* Read at the Meeting of the Book and Journal Club of the Medical and Chirurgical Faculty of Maryland, January 21, 1925.



NATHAN R. SMITH, M.D.

years later he sums up the history of the Splint in the . . . volume published by Kelly & Piet. . .

The Medical and Surgical Memoirs of Nathan Smith, published in 1831, are of great interest, because in this volume the Lithotome was illustrated for the first time. Further history of the instrument and of the operation is given by Allen P. Smith in the 1878 transactions of the Medical and Chirurgical Faculty.

The greatest of Doctor Smith's books in his quarto volume on the Surgical Anatomy of the Arteries. This book went through two editions, the first in 1832, and the second in 1835. It is dedicated "To My Distinguished Friend And Former Colleague, John Eberle, M.D., Professor of Medicine in The Medical College of Cincinnati." The lithographs showing the relation of the artery are copied from Cloquet's *Anatomie de l'Homme*. The pictures were redrawn by X. X. Sweet, and the lithographs printed by Sweet & Endicott of Baltimore. The book was published by Toy & Lucas, the second edition by Fielding Lucas of Baltimore. The printing was by J. D. Toy. This Toy printed Gidding's Journal and many other medical publications. He also printed the American Turf Register and Sporting Magazine (1829) as well as The Mutual Rights and Christian Intelligence, a Methodist Journal (1828). His place of business was at the Northwest corner of St. Paul and Baltimore Streets. The Sun-paper was printed then on Light Street near Mercer. . . . In the preface to the first edition, especial emphasis is laid on the fact that in the book there is shown for the first time, diagrams indicating the relative length and diameter of the various arteries. Apparently this innovation did not prove of much value, because these diagrams are omitted from the second edition.

There is a long discussion of the process of spontaneous arrest of hemorrhage from lacerated arteries, and details of several animal experiments made to throw light on the subject are included. Of great interest is the description of a self-locking artery forceps, which could be applied with one hand. A long laudatory review of the second edition will be found in the North American Archives of Medical and Surgical Science (Gidding's Journal) for 1835. The review is signed A. L. W. Was this A. L. Warner, one of the men put in charge of the Cholera Hospitals of Baltimore in 1832?

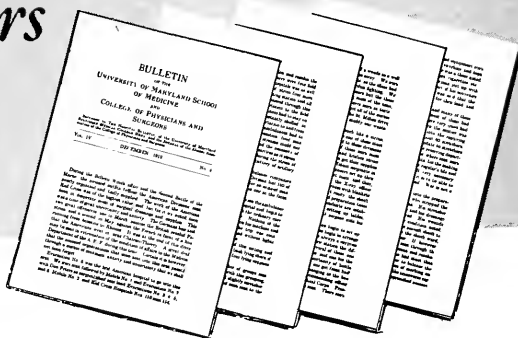
One of the fascinations of studying old books is the opportunity to leave the special quest for an adventure into a by-way temptingly marked with the name of a former owner on the fly leaf of the book. The second edition of

the Arteries now in the Medical and Chirurgical Library is marked with the name of George C. M. Roberts. This man was not only an excellent physician but was also a minister in the M. E. Church. He stood high in both professions. He was Professor of Obstetrics in the University of Maryland, and later Professor of Obstetrics and Diseases of Women and Children in the Washington University. He collected a museum which became the property of the Medical and Chirurgical Faculty. He was an active member of the Society, served on many committees, and was one of the editors of a journal published by the Faculty between 1839 and 1843. He enjoys the distinction of having been President of the Faculty for the longest term on record. He was President from 1859 until his death in 1870. Doctor Dunbar filled out his unexpired term and the next election made Nathan R. Smith his successor (April 20, 1870).

In 1869 Doctor Smith, then 72 years of age, published *Legends of the South*, a little book of whimsical tales about the White Sulphur, the Hot and some other Springs of Virginia. The sprightly humor of these stories gives an impression of Doctor Smith very different from that which comes from the picture of the grim man, with thin compressed lips and stern demeanor shown in the familiar portrait.

Of his many Journal articles I wish to invite attention to this one in the North American Archives of Medical and Surgical Science for August, 1835. It is the report of an Extirpation of the Thyroid Gland, and there is a lithograph to show the size and character of the lesion. The tumor was dissected out and the description of the manner in which the bleeding was controlled shows how difficult and formidable was this operation. Eighty years afterward the President of the Medical and Chirurgical Faculty made his presidential address on the Operative History of Goitre. Commenting on this case of Doctor Smith's, Doctor Halsted says: "When we consider that the patients were unanaesthetized and that the surgeon, until many years after Nathan R. Smith's day, was without forceps, and had to rely chiefly on aneurysm needles, hooks and the pressure of fingers or sponges for the control of hemorrhage, we must concede that the most difficult task of the present day surgeon is hardly more creditable than this operation by Smith on the Thyroid Gland in 1835. My admiration for Doctor Smith, Baltimore's Emperor, has been greatly increased since reading his modest and lucid report of a case, the importance of which he could hardly have comprehended."

Pages from the Bulletin of yesteryears



UNIVERSITY OF MARYLAND BULLETIN OF THE SCHOOL OF MEDICINE

Vol. X

JANUARY, 1926

No. 3

PASSED ASSISTANT SURGEON, U. S. N.,
JAMES M. M. AMBLER, M.D.,

and the

JEANETTE ARTIC EXPEDITION*

By S. T. EARLE, M. D.

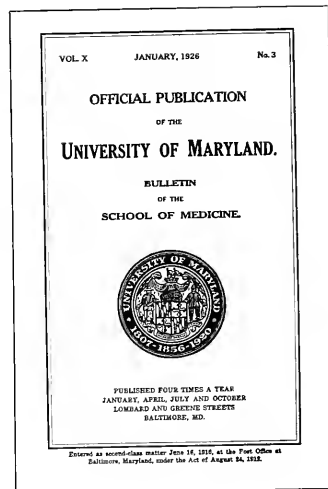
Mr. President and Gentlemen:

It is a sad duty that I assume tonight when I undertake to tell you something of the noble deeds and heroic death of James Markham Marshall Ambler, M.D., who was graduated from the University of Maryland, March, 1870, and practised general medicine in this city until April, 1874, when he enlisted in the United States Navy and was commissioned as Assistant Surgeon.

My chief object in presenting this biographical sketch of Dr. Ambler is that a record may be kept among the archives of the Medical and Chirurgical Faculty and, I hope, of the University of Maryland of his noble life and heroic death. In honoring his memory we are honored ourselves by the part we may have contributed in the formation of such a noble character.

As a classmate and close personal friend of mine for the two years that we attended the University of Maryland, I can state that he was held in high regard and greatly esteemed by the Faculty and students. As an evidence of which he had as his preceptors three of the most progressive and highly cultured members of the Faculty, Drs. Miles, Chisolm, and De Rossett, and was a member of the students Rush Medical Club, the members of which were selected for their good standing in the class.

* Read before the Book and Journal Club, Medical and Chirurgical Faculty of Maryland, March 19, 1925.



and who wished to improve their opportunity by being quizzed by their fellow members.

The following sketch is taken from The Journal No. 18 of the Association of Military Surgeons for 1906, and from the United States Naval Bulletin for April, 1917, the latter containing the full report of Dr. Ambler's Diary.

Dr. James Markham Marshall Ambler was born in Fauquier County, Virginia, December, 1848. He was the son of Dr. Richard Cary Ambler and Susan Marshall, a niece of the Chief Justice, and a grand-daughter of Robert Morris, the financier of the Revolution. Dr. Ambler received his early education at the local schools, attending later Washington and Lee University at Lexington. He studied medicine and was graduated from the University of Maryland in 1870, and was commissioned an Assistant Surgeon in the Navy in 1874. He served on the Mayflower and Kansas, North Atlantic fleet, 1874-1875, and Training Ship Minnesota, 1875-1877, and in this year was promoted Passed Assistant Surgeon. At the time of his orders to the Arctic Steamer Jeanette, Dr. Ambler was serving at the Naval Hospital at Norfolk, Va. He was due for sea service and was in expectation of a detail to the flag ship of the Mediterranean Squadron when he was requested by the Navy Department to volunteer for the Arctic expedition, patronized by James Gordon Bennett and commanded by Lieutenant DeLong, U.S.N. This was optional.

Ambler was in every way fitted for the unusual duty that he had accepted. He was unmarried and in the fullest sense of the word a worthy descendant of the many distinguished families of which he came. Born and reared in the invigorating climate of Piedmont, Va., he was blessed with strong health, and possessed a fine physique, being tall, broad-shouldered, and well-proportioned. He was a man of commanding appearance, and happily combined dignity of manner with an admirable courtesy. It has been said that the education of the Virginia boy consists in "learning to ride, shoot, and tell the truth." We well know that this man carried his honor so high that the terrible vicissitudes left it fair and untarnished.

The Jeanette Expedition was commanded by Lieutenant DeLong, a very able officer, and associated with him were Lieutenants Chipp and Danenhower, Passed Assistant Surgeon Ambler, Chief Engineer George Melville, U.S.N.; Mr. Collins as scientist, and Captain Dunbar, an experienced ice pilot. Sailing from San Francisco on the 8th of July, 1879, the Jeanette passed Bering Strait, and directed

her course to the north-west. Meeting the ice pack early in the year, the ship boldly plunged into it, and on the 6th of September was solidly frozen in. From the date of entering the pack until June, 1881, the ship was an absolute prisoner, as were the officers and the crew, if we except the forays in search of game, and Melville's journey to and planting the flag on Henrietta Island, which was accomplished under great difficulties. Melville in his honest, terse English, tells us of De Long and Ambler coming out some distance to "pick him up" and continuing says: And the Doctor, generous soul that he was, inquiring first of the health of the party, said in his hearty way, "old man, I am glad you have had the opportunity of first unfurling our flag with honor."

Dr. Ambler is shown to have been on the alert for scurvy, the bane of Arctic explorers, yet greatly to the credit of the expedition, not a well authenticated case occurred. De Long's active mind extended to this branch of polar exploration also, involving as he knew, the success of his project, and today in the archives of the Navy Department is a careful study of this malady, which is in itself a monument to the learning and industry of its author. We must attribute this immunity of the Jeanette's company in this regard, to the abundance of canned provisions, and the great care to furnish potable water (that from melting snow not being used, except on the retreat). But in lieu of scurvy another class of disease occurred; digestive troubles in various forms—cramps, constipation, diarrhea, and dysentery.

Ambler, by analysis, proved these to be due to lead poisoning from soldered cans. Several of the crew were much weakened in this way, and had to be transported over the ice, on the long journey to the Lena. When we read the journal kept by Ambler, not only on this ship, but on the ice, we are at once aware that his duties were no sinecure. His own health too was impaired by the strain and unnatural conditions so long borne. Ere the retreat commenced, in entering his daily record, he says, "I am passing bloody stools daily."

The retreat of De Long's party over the Arctic ice to the mouth of the Lena River stands today without a parallel for indomitable courage displayed, for the discipline preserved, and for cheerful discharge of duty. When the ship sunk, she was abandoned with perfect order, every detail being perfected long before. The ship's company camped upon the ice, in sight of the ship, but their brave hearts did not go down with her. Their situation was most

lamentable, their health had already been sorely tried, when they were called upon for almost superhuman effort. Lieutenant Chipp was so ill as to require great care, and upon him Ambler bestowed the greatest attention. Lieutenant Danenhower's eyes had failed, and he was an additional burden. With a sick list and a limited supply of provisions, they must walk 500 miles over a road cut through the ice, or across bergs that treacherously parted beneath their feet. Yet from all accounts, these men accepted the inevitable cheerfully, and their diaries are full of jokes and banter. Ambler's great longing, Melville tells us, was to renew his "electrical connection with the earth."

In addition to the transportation of the sick and hospital supplies, tents, etc., Ambler was made road-master, and put in charge of bridging and rafting, the difficulties of which increased so, finally it required the efforts of all hands to advance one piece, and as the three heavy boats they must carry, with which to meet the open waters of the South, added to provisions, etc., required thirteen teams, every mile they traversed the ice was traversed thirteen times.

We wonder how this band of men could ever have continued in an effort, apparently so hopeless, with a very limited diet and few hours of undisturbed sleep. Often the floes on which they were camped would part in many pieces, carrying men, provisions, dogs, and equipment in as many directions. The labor, danger, and anxiety, under such circumstances, was enough to crush the most indefatigable. Even at night the ice cracked and parted beneath them. Those sleeping in the middle of rubber sheets being saved by the weight of those at the ends. But a still more appalling fact was yet to face this hardy band advancing thirteen miles for one, and this was the discovery of a drift of twenty-six miles to the Northward. De Long imparted the information to but few of his command. Shoving and pulling their boats through snow drifts waist deep, or dragging them over the roughest ice, they could keep little on their feet, the hide shoes they made quickly cutting to pieces.

Ambler tells us in his journal of his repeated passage and repassing over the day's advance, and on one occasion being so late and seeing so badly when going to bring up the rear, composed of the sick, falling in the water to his neck and nearly drowning.

Yet amid all we perceive a high spirit and admirable discipline, duties were as distinct, stations and quarters as surely indicated as on

ship-board; while on Sundays, they never failed to read the act for better government of the Navy.

The Medical Journal is kept with remarkable regularity and neatness, while we wonder at the ink's not freezing, or how the medical officer could hold a pen. Day in and day out, the condition of his sick, the care of his stores, the progress of his party, all are noted, in clear and concise style.

Setting foot on land for the first time in two years, they at last obtained a little rest on Bennett Island, where poor Jack's wail was "on shore with two years' pay and nowhere to spend it."

Winter set in during August, accompanied by terrific gales, and as most of the journey was now in boats, these half-starved creatures were so often wet, as to be nearly frozen to the thwarts upon which they sat. From August 6th to September 16th, the period between leaving Bennett Island to the time of Melville's entering the Lena River, six tents and their occupants were doubled in three boats, and existence was one unending battle with the ice and the tempest. On reaching the coast, the three boats were separated in a Northeast gale. That commanded by Lieutenant Chipp was never again heard from. Melville in the whale boat, which proved the most worthy craft, after incredible hardships, landed in the Lena River and crawled ashore with his men. De Long's boat, which also carried Ambler, struck the river at one of its termini, well to the westward of Cape Barkin, to which the loss of his party was largely due as the river with its multitudinous divisions and subdivisions, made traveling to a strong, well-nourished man difficult, but De Long's party was feeble, and with no authentic map, and its fate hopeless from the first. From the time of landing, September 17th to October 11th, the little remnant struggled on, cheered by the indomitable courage of De Long. Ambler still husbanded his stores, issued alcohol by the ounce and glycerine by the drachm. He was overburdened with his helpless comrades with frost-bitten feet, and to them he still maintained his ministrations, still daily wrote in his journal, which remains today in archives of the Bureau of Medicine and Surgery of the Navy, a monument to his professional devotion. De Long decided in his extremity to send two men in advance to seek assistance.

Ambler writes in his journal, 9th October, 1881, "the Captain gave me the option of going ahead, but I thought my duty required me with him and the main body for the present," and

later he cheerfully adds, "Ninderman and Nors (these two men were found and saved by Esquimos) are ahead, God give them aid and we are getting on." October 12, 1881, is the last record. "We have been without food since Sunday, except alcohol an ounce, glycerine a drachm yesterday, lying in hollows on the river bank." We cannot contemplate the suffering of this company between this date in Dr. Ambler's journal, and the date of his last words, written October 20th, 1881, to his brother Edward Ambler, Esq., Markham P. O., Fauquier County, Va., without a feeling of deepest sorrow. He says in part: "I write these lines in the faint hope that by God's providence they may reach you all at home. I have now for myself little hope of surviving. We have been without food nearly two weeks, with the exception of four ptarmigan among eleven of us. We can barely manage to get wood enough to keep warm and in a day or two that will be passed. If it has been God's will for me to see you all again, I had hoped to have enjoyed the peace of home living once more. My mother knows how my heart has been bound to hers since my earliest years. God bless her on earth and prolong her life in peace and comfort. May his blessings rest upon you all. As for myself, I am resigned, and bow myself in submission to the Divine will. To all my friends and relatives a long farewell. God in his infinite mercy grant that these lines may reach you. I write them in full faith and confidence in the help of our Lord Jesus Christ." Melville, who found the bodies, tells us Ambler was the survivor.

FINDING OF THE BODIES.

The following is taken from Melville's book "In the Lena Delta, Page 333."

De Long had crawled off to the northward

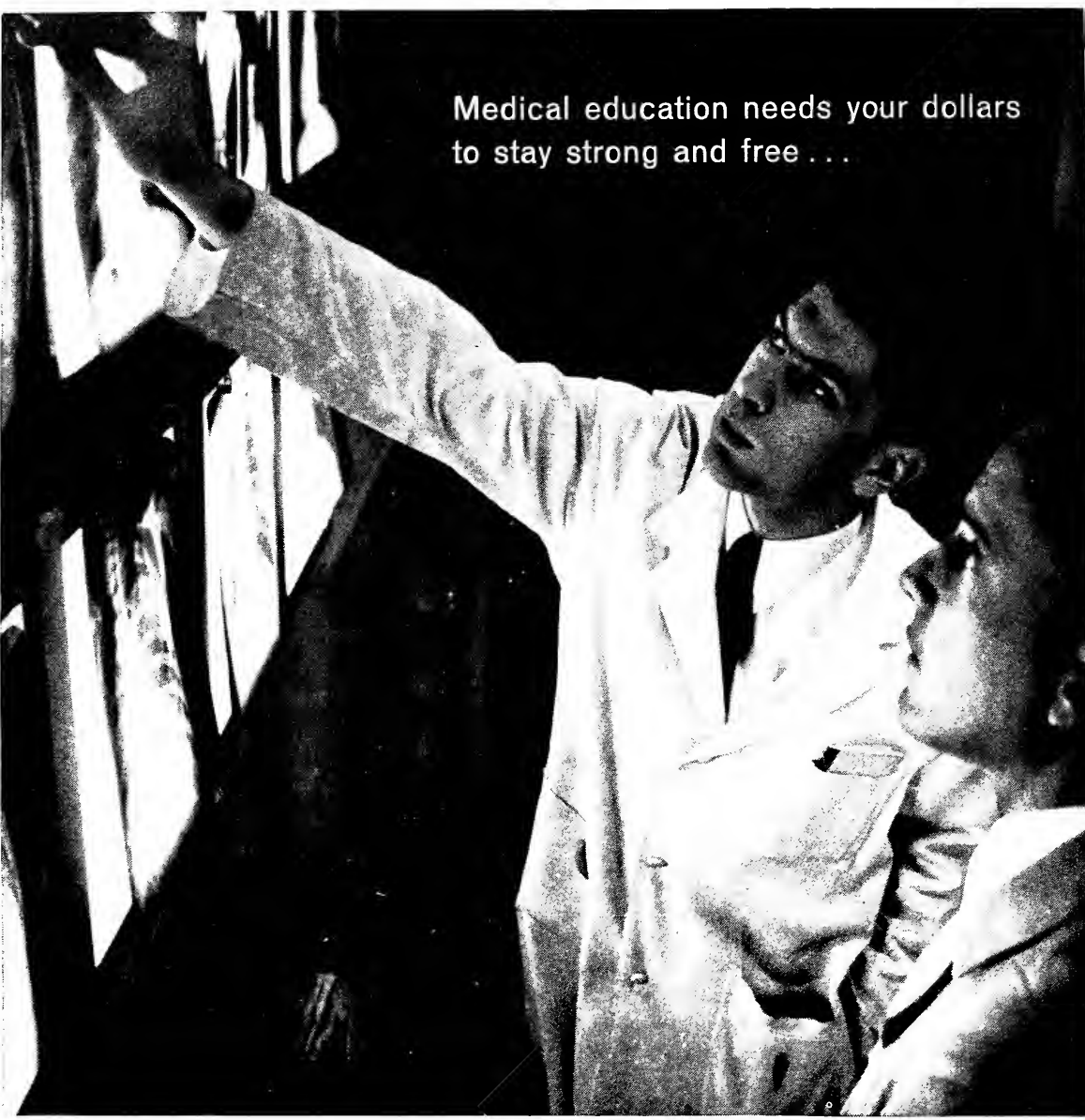
and about ten feet from Ah Sam, while Dr. Ambler was stretched out between his feet nearly touching the latter and his head resting on a line with De Long's knees. He lay almost prone on his face with his right arm extended under him, his left hand raised to his mouth. In the agony of death he had bitten deep into the flesh between his thumb and forefinger, and around his head the snow was stained with blood.

I believe him to have been the last of the unfortunate party to perish. When Ah Sam had been stretched out and his hands crossed upon his breast, De Long apparently crawled away and died. Then, solitary and famishing, in that desolate scene of death, Dr. Ambler seems to have taken the pistol from the corpse of De Long, doubtless in the hope that some bird, or beast might come to prey upon the bodies and afford him food; perhaps alone to protect his dead comrades from molestation, in either case or both, there he kept his lone watch to the last, on duty, on guard, under arms.

The remains were returned to the United States, those of Ambler being deposited in the church yard at Markham, under the shadow of the Blue Ridge, where he was born and had passed his early years. Both in the church and at the Naval Medical School, his brother officers have erected tablets to his memory with the legend

"LOVE OF DUTY STRONGER THAN LOVE
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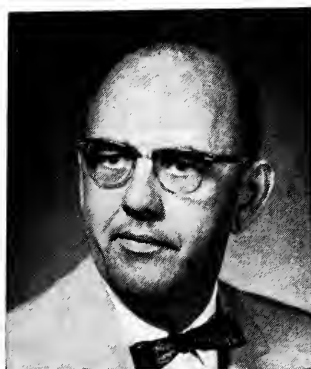
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ALUMNI ASSOCIATION SECTION

President's Letter

Fellow Medical Alumni:

At this reading a goodly portion of my year in office will have slipped by. Efforts in various areas will have been made—some successful and some just other “ships that passed in the night.” I cannot help but wonder what it takes to engender interest and pride in some graduates, in the school that provided them their medical education. This thought was expressed to me some years ago by Dr. Charles Reid Edwards, who always supported his alumni association. May I recognize here Dr. Edwards’ passing and pay him homage for his many contributions, in many ways, to the University of Maryland Hospital, School of Medicine and the Medical Alumni Association. As some fall, others must step forward and take their place. Without this, no “hill” has ever been won, no idea or principle established.

March 12th saw our successful Oyster Roast thoroughly enjoyed, I am sure, by all who attended. The menu was really fabulous and the entire affair well planned and well executed. I can say this because I had nothing to do with it except enjoy it. The affair was handled by a committee of Bill Triplett, Bob Goldstein and Bill Kammer. If you were there and really enjoyed it, tell them so when you see them.

Our plans for the Annual Alumni Day, June 3, 1965, are well “in the works.” Co-chairmen, Howard Mays and Jack Sharrett, have arrangements you will enjoy. Have you taken the time to look at your calendar and see if your class is one of the “special 5-year reunions”? Why don’t you look now, you still have time to arrange things in the office so that you can get here! The whole complexion of “downtown” Baltimore has and is changing. The wife and kids would very likely want to come along. You really don’t have to be in the “special groups” to come. Don’t just say “maybe” or “perhaps”—this year. Remember that old saw about “time and tides.”

I want to tell you about a couple of areas of interest in the recent discussion of the Board. We have felt for some time that there is a real need for the maintenance of a good curriculum vitae on all graduates. If such a program is ventured upon, it should be a well-developed

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one that is well maintained. A committee of the Board is investigating the manner in which such a program can be developed, its general format and the machinery and personnel necessary to operate it properly. We'll try to keep you posted as the program is explored and developed. Secondly, interest has again flared in an Alumni-Faculty Club or Facility at or adjacent to the Baltimore Campus, embracing all five Alumni areas: Medicine, Dentistry, Law, Nursing and Pharmacy. Locally there have been some expressions of opinion. I am sure that many of you would have some thoughts on the subject. We would be most happy to hear from you, either by letter or in person, when you are here for June 3rd.

Perhaps there are some areas that are of interest or concern to you. Won't you drop us a line and tell us about it? All projects that come to us are the "brain-child" of some interested alumnus.

Looking forward to seeing you all personally on June 3rd.

J. HOWARD FRANZ, M.D.
President

HOWARD MAYS, Alumni Treasurer, Resigns

*Mr. President and Members of the
Medical Alumni Association:*

This report marks the end of my service as Treasurer to the University of Maryland Medical Alumni Association. The years I have served in this capacity have been rewarding and a stimulating experience primarily because I have become increasingly aware of the tremendous potential of our organization and of the role it should assume now and in the future. In order that the Association may be increasingly effective, a sound financial basis is a necessary requirement and therefore I am pleased to be able to present a favorable report.

Through carefully considered control of expenditures the Association has steadily advanced from a rather precarious financial position to one of appreciable strength and a basis upon which we hope to build

for the future. A funded reserve has been established for the purpose of stabilization and a basis for expanding the scope of the Alumni Association activity. Scarcely adequate financial support, unsatisfactory office conditions and incomplete records have in the past limited the function of our organization. Improvement of facilities and enlargement of the scope of activity should greatly enhance the position and effectiveness of the Association through encouragement of a greater active interest of the graduates and the continuing development of the Medical School.

I am pleased to have served as Treasurer of the Alumni Association for the past five years and I wish to take this opportunity to urge continued support of all graduates.

Respectfully submitted,
HOWARD B. MAYS, M.D.

Medical Alumni Day, June 3, 1965



THEODORE M. DAVIS, M.D.

Dr. Theodore M. Davis to Receive Alumni Gold Key

An exciting and important program for the annual meeting of the Medical Alumni Association has been planned for Thursday, June 3, 1965, according to the Co-Chairmen of the Committee, Drs. Howard B. Mays and John O. Sharrett.

Events will begin at 8:30 A.M. with registration in Davidge Hall. At 10:00 A.M. Dr. J. Howard Franz will preside. Dr. William S. Stone, Dean of the School of Medicine, will open the session. A message from the Puerto Rico Alumni will be delivered by Dr. Guillermo Picó, Professor and Chairman of the Department of Ophthalmology of the University of Puerto Rico School of Medicine. This will be followed by two scientific papers as follows.

1. "The Clinical Picture of Schistosomiasis Monsoni" by Dr. Mario R. Garcia Palmieri, Professor and Chairman of the Department of

Medicine, University of Puerto Rico School of Medicine.

2. "Etiology, Pathogenesis, and Treatment of Pterygium" by Dr. Guillermo Picó, Professor and Chairman of the Department of Ophthalmology, University of Puerto Rico School of Medicine.

The annual business meeting of the Medical Alumni Association will be held at 11:00 A.M. and will open with the presentation of the annual Alumni Honor Award and Gold Key, awarded this year to Dr. Theodore M. Davis, pioneer urologist of Greenville, South Carolina, and honor graduate in the Class of 1914.

Theodore McCann Davis was born on December 23, 1889, in Greenville, South Carolina, where he still resides. After preliminary education in the public and private schools of that city, he attended Furman University, worked for awhile

in Electrical Engineering, ultimately choosing medicine as a career. In 1910 he completed his premedical requirements and entered the School of Medicine of the University of Maryland. In 1914 he was graduated with the highest honors, received the Faculty Gold Medal, and for the next year he served as resident surgeon in the University Hospital. He then became assistant and associate to Doctor W. C. Black of Greenville, South Carolina. In 1920 he began to limit his practice to urology. During these early days, Dr. Davis became interested in transurethral surgery, a technique known for a number of years, but never perfected. During the next five years he studied intensely the early work of Guthrie and later of Stern, ultimately developing and perfecting the dual current type of prostatic resection, including numerous instruments and allied equipment. In the next decade he published more than 15 articles on the subject of transurethral prostate resection which have since become the primary and important contributions to this technique. This gained for him international recognition. In 1931 he joined the Crowell Clinic of Urology and Dermatology of Charlotte, North Carolina, becoming the Chief of the Department of Prostatic Resection and Operative Cystoscopy.

Suddenly in 1937 he suffered a severe attack of coronary occlusion and retired from the active life of the past 15 years.

Recently the Southeastern Section of the American Urological Association on March 14, 1965, held a Symposium on Transurethral Surgery at which time a Certificate of Merit was awarded him on the basis of his outstanding pioneer work and his many contributions to the development of transurethral surgery.

Dr. Davis has been honored by many offices and by membership in many learned societies. He has long been a member of

the Greenville (South Carolina) Medical Society and served as its President in 1919. He was a member of the staff of Greenville County General Hospital and President in 1922 and for many years was Chief of the Urology Service. He was President of the Staff of St. Francis Hospital, Greenville, in 1923. He is a member of the American Urological Association, the American Association of Genito Urinary Surgeons, the Southern Medical Association and is a Fellow of the American Medical Association. Among other learned societies he has membership in the Societe Internationale D'Urologie and is a charter member of and a Diplomate of the American Board of Urology. He is an honorary member of the Hollywood Academy of Medicine. The following list includes some of the more important original investigations which he has published.

A New Method of Preparing Wax Bulb Catheters or Bougies for Use through Any Operating Cystoscope, *Journal American Medical Association*, 75:310, 1920.

Resection of Obstructions at the Vesical Orifice with Maximillian Stern Resectoscope. Read before South Carolina Medical Association, April 19, 1928. Published *South Carolina Medical Journal*, pages 273-279, 1928. (In this paper is first description of a balloon urethral catheter, pages 275-276.)

Guest Editor, Urology Department. Differential Diagnosis of Appendicitis and Obstructions in the Lower Right Ureter. *Southern Medicine and Surgery*, Dec. 1927.

A Simple Method for Removing Blood Clots From the Urinary Bladder. *Journal American Medical Association*, 92:2168, 1929.

Resection Of Prostate Gland Obstructions with Stern Resectoscope Equipment. Read before Southern Medical Association, Asheville, N. C., Nov. 12-15, 1928. Published *Southern Medical Journal*, 22:228-534, 1929. (First use of caroid solution for dissolving mucus balls in bladder.)

Resection of Prostate Gland Obstructions. Read before Third District Medical Society, Laurens, S. C., Sept. 3, 1929. Published *South-*

ALUMNI ASSOCIATION SECTION

- ern Medicine and Surgery*, Charlotte, N. C., Nov. 1929.
- Resection of Prostate Gland Obstructions. Read before South Carolina Medical Association, Florence, S. C., May 7, 1930. Published *South Carolina Medical Journal*, 26: No. 9, 1930.
- Resection Of Vesical Orifice Obstructions, A Minor Surgical Operation. Published *Urologic and Cutaneous Review*, Jan. 1931.
- Prostatic Resection, Motion Pictures. Presented American Urological Association, May 20, 1931, Memphis, Tenn. Published *American Urological Journal*, 1931.
- Prostate Operation, Prospects of the Patient with Prostatic Disease, In *Prostatectomy Versus Resection*, Motion Pictures. Read before the section on Urology, American Medical Association, Philadelphia, Pa., June 10, 1931. Published in *Journal American Medical Association*, 97: 1674-1679, 1931.
- Davis Method of Prostatic Resection. Published in *International Surgical Digest*, 13: 3-14, 1932.
- Transurethral Correction of Prostatic Obstruction. With Motion Picture Demonstration. Paper of the Evening. American Urological Association, The New York Society, January 1932. Published in *Annals of Surgery*, June 1932.
- By request: Symposium, Prostatic Resection with Motion Picture Demonstration. Section on Urology. American Medical Association, New Orleans, La., May 1932. Published *A.M.A. Journal*, 1932.
- Results in 385 Cases of Prostatic Resection by the Davis Method. Read before American Association Genito Urinary Surgeons, Niagara Falls, Can., May 27, 1932. Published in *Transactions of the American Association Genito Urinary Surgeons*, 1932.
- Transurethral Prostatic Resection with Report of 748 Cases. Read before Southern Medical Association, San Antonio, Tex., Nov. 13-16, 1934. Published in *Southern Medical Journal*, 28: 693-700, 1935.
- Technique of Prostatic Resection. Read before Southeastern Section American Urological Association, Charlotte, N. C., Dec. 4-5, 1935. Published *American Urological Journal*, 1936.
- Prostatic Resection, Report of 748 Cases. Published *Urological and Cutaneous Review*, 39: No. 6, 1935.
- Physician, surgeon and honored alumnus of the School of Medicine, investiga-

tor and renowned practitioner, Dr. Davis has earned the respect and acclaim not only of the thousands he has successfully treated, but of his fellow alumni and professional colleagues alike. His contributions to the field of urology have been fundamental, lasting and have won for him international renown. It is, therefore, prudent that the Medical Alumni Association on this day recognizes and nominates Theodore M. Davis, University of Maryland Class of 1914, for its highest honor, the Alumni Honor Award and Gold Key "for important contributions to medicine and for distinguished service to mankind."

Following the presentation of the award to Dr. Davis there will be the customary luncheon to be held this year in the Student Union Building. Tickets are required and may be obtained at the Registration Desk in Davidge Hall.

The afternoon of June 3 will be allocated for class reunions. Individual classes will be sending notices concerning these functions.

Alumni Banquet to Honor Classes of 1915 and 1965

THE ANNUAL banquet will be held at 7 P.M. in the Lord Baltimore Hotel. Doctor J. Howard Franz will preside. Highlights of the evening will include the presentation of 50-year certificates to the P and S Class of 1915 and to the graduates of the University of Maryland class of the same year. Members of the graduating class of 1965 will be received into the Alumni Association and will be introduced. Speaker of the evening will be Mr. Tom McDavid, Vice President of Commercial Credit Corporation of Baltimore, Maryland. Mr. McDavid will speak on "The Sin of Procrastination."

**A Message from W. E. Karfgin,
Treasurer, Alumni Association**

YOUR Board of Directors is endeavoring to make your association a stronger and more forceful one with a significant voice in the policies of the Medical School. To do this we must have the backing and support of a large number of active members and we must be financially sound. We must have the money to finance the projects we feel necessary to undertake at this time.

I think it is appropriate that all members know what happens to their dues and what your society is planning for the coming year. Of the ten dollars paid annually, three dollars goes to your subscription to the BULLETIN OF THE SCHOOL OF MEDICINE. It is interesting to note that your BULLETIN was voted, in a national survey by the Association of the American Medical Writers, as being one of the top ten regional interest publications, and that this association feels that regional publications in some cases are more widely read than those of national scope. This being the 50th anniversary of the BULLETIN, your Alumni Association has allocated a total of \$2,000.00 above our normal appropriations to make this year's journal fitting to the occasion.

In the past it has been the Association's policy to send new graduates the BULLETIN one year free of charge. This year, in the hope that we will stimulate enduring interest in the School of Medicine, we are extending the free subscription to a period of two years.

We realize the need for adequate Alumni offices and meeting facilities on or near the Baltimore campus. To achieve this goal a funded reserve, deposited in a local bank, has been started and we hope to add to it each year. Already committees of each component school on the Baltimore campus are at work laying the groundwork for such facilities.

At present there is no satisfactory or adequate curriculum vitae for the graduates of the University of Maryland School of Medicine. We feel this is a prime requisite and that, in spite of the great amount of work involved, the lack of office and storage space and the need of money to underwrite this project, now is the time to begin.

We feel sure that you will want to have a part in these undertakings. May we look forward to an early remittance of your current dues?

Sincerely,
WALTER E. KARFGIN, M.D.
Treasurer

Class

NOTES

ELSEWHERE in this edition you will find a "tear out" page, for reporting *Alumni News* to the BULLETIN. This is not an idle gesture.

Your achievements, fellow alumnus, are of interest to your classmates. They constitute a reward to the faculty, are a challenge to the younger physicians, and are an item of prestige for the University. Please cooperate with us by forwarding news of yourself or any alumnus to the BULLETIN. Thank you.

Class of 1902

Dr. Albert G. Singewald, Baltimore's oldest practicing physician, was honored by the Baltimore City Medical Society at its regular meeting on March 5. Dr. Singewald still maintains office hours and is active in practice 63 years after receiving his diploma.

A veteran of World War I, Dr. Singewald has his offices at 1613 East North Avenue in Baltimore. Dr. Singewald was the subject of an interesting article entitled "Baltimore's Oldest Practicing Physician," published in a recent issue of the *Sunday Sun Magazine*, February 21, 1965.

Class of 1925

Dr. Eva F. Dodge, former professor of obstetrics at the University of Arkansas School of Medicine, has been named director of the Detroit Maternity and Infant Care Project, a joint city-state-federal program aimed at reducing infant and maternal deaths, mental retardation and other serious congenital defects. Dr. Dodge will also serve as a consultant to the Michigan

Department of Health's Division of Maternal and Child Health.

Class of 1926

Dr. Margaret B. Ballard has announced her retirement from active practice as of June 1, 1965. Dr. Ballard, who has served for many years as an active member of the Department of Obstetrics of the School of Medicine, has also served as one of the important professional persons responsible for planned parenthood league in the State of Maryland. Dr. Ballard will retire to West Virginia where she will complete her studies on a history of the School of Medicine which she plans to publish in the near future. Dr. Ballard is a niece of the former Dr. A. B. Ballard of Peterstown, West Virginia, an alumnus of the College of Physicians and Surgeons in the class of 1890.

Class of 1935

Dr. Harry Teitelbaum is the author of a recent volume entitled *Psychosomatic Neurology* published by Grune and Stratton.

Class of 1938

Dr. Edward Siegel was honored as Plattsburg's (New York) outstanding citizen of the year for 1964. A banquet held on February 20 was in his honor. Dr. Siegel has also been elected to the Council of the New York State Medical Society. He is an alternate delegate to the American Medical Association from New York. He has been also elected Chief of Staff of the Physician's Hospital at Plattsburg. Dr. Siegel has offices at 44 Broad Street, Plattsburg, New York.

Class of 1951

Dr. Guy M. Reeser, Jr., of St. Michaels, Maryland, has been elected President of the Maryland Academy of General Practice.

Class of 1953

Dr. George O. Himmelwright of Cumberland, Maryland, has been named President-elect of the Maryland Academy of General Practice for the year 1965-66.

Since he began his practice in Cumberland almost eleven years ago, Dr. Himmelwright has become a leader in medical affairs in Maryland's second largest city. He is chairman of the General Practice Section of Memorial Hospital in Cumberland; vice president of the staff and chairman of the Tissue Committee in the same institution. He serves as physician in chief for the athletic department for the Fort Hill High School in Cumberland. He is a past president of the Allegany County Medical Society and also the Allegany-Garrett County Heart Association. Dr. Himmelwright is also a fellow in the American College of Sports Medicine. He is the first physician in the Cumberland area to receive this fellowship honor.

Class of 1953

Dr. Norman L. Miller has announced the removal of his office for the practice of pediatrics to the Milford Medical Center, 3610 Milford Mill Road, in Baltimore.

Class of 1954

Lieutenant Commander Walter D. Gable, USN, formerly a member of the Department of Pathology at the School of Medicine and until recently a member of the staff of the Armed Forces Institute of Pathology, was recently awarded the Army Commendation Medal for his work in aviation pathology. Dr. Gable is currently serving as a flight surgeon aboard the USS Ticonderoga. The commendation letter said in part, "Commander Gable's informative and comprehensive studies on the cause of death in aeroplane accidents

contributed in a great measure to the field of aviation safety . . . he rendered exceptional service to the advancement of aviation pathology by devoting his time and efforts in the training and education of both American and foreign medical officers in aviation pathology."

Class of 1955

Dr. Herbert L. Yousem has announced the removal of his office to the Belvedere Towers, Belvedere Avenue and Falls Road, Baltimore. Dr. Yousem is associated with Dr. Paul C. Weinberg in the practice of gynecology and obstetrics.

Class of 1956



Dr. J. Henry Hawkins has been appointed assistant medical director of the Connecticut General Life Insurance Company with offices in Hartford, Connecticut. Dr. Hawkins has been with the

Connecticut General Life Insurance Company in the medical department since 1960.

Class of 1960

Dr. Nathan Stoffberg has announced his association in the private practice of diagnostic and therapeutic radiology with Drs. Herbert Copeland (Class of 1944) and Nathan Hyman (Class of 1946). The group employs two offices, one at 701 Cathedral Street in Baltimore and at the Uptown Federal Building at 6609 Reisterstown Road. Dr. Albert Shackman is also a member of the partnership.

Deaths

Class of 1897

Dr. Harry L. Baptist of 87 32nd Street, Newport News, Virginia, died November 28, 1964. Dr. Baptist was 90.

B. M. C. 1901

Dr. Fletcher F. Carman of 21 Parkway, Montclair, New Jersey, died December 24, 1964. Dr. Carman was 88.

P & S 1904

Dr. James Edward Wilson of Clarksburg, West Virginia, died on October 10, 1964, at the age of 83.

P & S 1905

Dr. Frederick W. Davis of 4250 Maricarr Drive, Kettering, Ohio, died recently.

B. M. C. 1906

Dr. Russell E. Blaisdell of 200 Braunsdorf Road, Pearl River, New York, died March 5, 1965, at the age of 82.

Dr. Henry J. Walton, Emeritus Professor of Roentgenology in the School of Medicine, died on January 24, 1965. Dr. Walton was 86. Dr. Walton's obituary appears elsewhere in the BULLETIN.

Class of 1906

Dr. Joseph McElhattan of Freeport, Ohio, died September 14, 1964. Dr. McElhattan was 84.

B. M. C. 1910

Dr. Joseph C. Rutrough of Willia, Virginia, died December 1, 1964. Dr. Rutrough was 80.

P & S 1910

Dr. Thomas Francis Keating of 18675 Gainsborough, Detroit, Michigan, died March 2, 1965.

Class of 1912

Dr. Reese Alexander Allgood of Pickens, South Carolina, died recently.

Class of 1913

Dr. Charles Reid Edwards, Emeritus Professor of Surgery in the School of Medicine, died on February 1, 1965, after a long illness. Dr. Edwards' obituary will appear elsewhere in the BULLETIN.

Dr. Vertie Edward Edwards of Stokesdale, North Carolina, died recently.

P & S 1914

Col. Frank M. Moose, M.C., U.S.A. (Ret.), of 4501 Dalton Road, Chevy Chase, Maryland, died October 12, 1964.

Class of 1914

Dr. William Sebastian Walsh of 24 Greateon Drive, Providence, Rhode Island, died on January 31, 1965, at the age of 75. Dr. Walsh was an authority on mental retardation and did work in Maine, Rhode Island and Florida. He was the author of eight books on this subject.

A member of the faculty of the University of Florida, he was a life member of the American Psychiatric Association. Dr. Walsh is survived by two brothers, one of which is Dr. John N. Walsh of Providence, Rhode Island.

Class of 1915

Dr. Lyle L. Gordy of 5106 Harford Road, Baltimore, Maryland, died on March 22, 1965. Dr. Gordy was 79.

Following his graduation from the

School of Medicine, he moved to Sharptown, Maryland, where he remained for six years. He then moved to Baltimore and opened his office on Harford Terrace. For several years he was a member of the faculty of the School of Medicine.

Dr. Gordy was a past president of the Wicomico County (Maryland) Medical Society, was a member of the American Medical Association, the Medical and Chirurgical Faculty and the Rush Medical Fraternity.

Dr. Charles E. Sima of 2074 East Belvedere Avenue died recently.

P & S 1915

Dr. William Henry McCallion of 308 Passaic Avenue, Springlake, New Jersey, died on January 2, 1965.

Class of 1916

Dr. Ignatius P. A. Byrne of Governor's Club Hotel, Fort Lauderdale, Florida, died December 17, 1964. Dr. Byrne was 85.

Dr. Lewis F. Cole of Hamilton County, Wells, New York, died December 13, 1964. Dr. Cole was 71.

Class of 1917

Dr. Francis Fabian Nolan of 254 Branby Street, Norfolk, Virginia, died September 26, 1964.

Class of 1918

Dr. John Bryan Bonner of Aurora, North Carolina, died November 4, 1964. Dr. Bonner was 70.

Dr. William Arthur Darby of 211 Goodale Road, Baltimore, Maryland, died January 27, 1965, at the age of 73.

Dr. Darby, who had been Medical Director of the Silver Cross Home for the

Aged, was formerly associated with the Union Memorial Hospital and the Kernans Hospital. He was a native of Greenhill, Maryland, and specialized in surgery throughout his entire career. He served during World War I as a first lieutenant in the Army Medical Corps. Dr. Darby had recently established a scholarship at the Franklin Square Hospital School of Nursing in memory of a granddaughter, Miss Robin D. Meise, who died in 1964.

Class of 1920

Dr. James Thomas Kenure of 29 Ocean Avenue, New London, Connecticut, died recently.

Dr. Clayton C. Perry of 1422 Euclid Avenue, Cleveland, Ohio, died recently.

Class of 1922

Dr. William A. Gollick of Parklynn Apartments, Wilmington, Delaware, died recently.

Class of 1924

Dr. Phillip Morris of 260 Lee Avenue (Station A), Brooklyn, New York, died recently.

Class of 1932

Dr. Reuben R. Louft of 111 Capitol Street, Charleston, West Virginia, died October 14, 1964. Dr. Louft was 58.

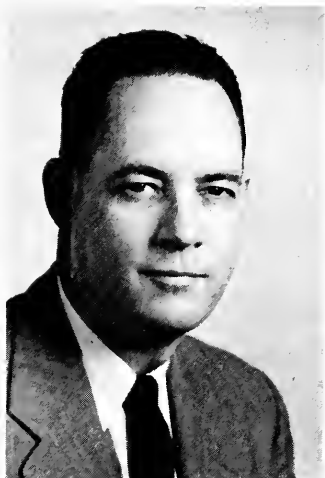
Class of 1934

Dr. Sigmund Goldberg of 12 East Pratt Street died recently.

Dr. Milton Siegel of 585 West End Avenue, New York, New York, died on November 10, 1964, at the age of 57.

Class of 1939

Dr. Melvin D. Kappelman of 817 St. Paul Street died December 26, 1964. Dr. Kappelman was 49.



STUART G. COUGHLAN, M.D.

Stuart Gray Coughlan

Class of 1937

Died

Dr. Stuart Gray Coughlan died on April 2, 1965, of a cerebral hemorrhage. Dr. Coughlan was 53. Stricken on March 29, 1965, while performing an operation at King's Daughters' Hospital in Staunton, Virginia, he was transferred to the University Hospital in Charlottesville, where he died a few days later.

The only child of the late William R. and Nellie Gray Coughlan, Dr. Coughlan was born in Baltimore, Maryland, on June 3, 1911. Educated in the Baltimore public schools, he graduated from Baltimore City College in the mid-year class of 1930. He spent the next three years in premedicine at College Park and entered the University of Maryland School of Medicine in the fall of 1933. He received his B.S. degree in 1934 and his M.D. in 1937.

Following Medical School he served as an intern at the University Hospital and went on to complete his surgical residency at that hospital. At the onset of World War II he joined the University Hospital Unit, the 142nd General Hospital, and with them served in the Fiji Islands and the China-Burma-India theater from 1942 to 1945, being promoted to the rank of Lt. Colonel.

Dr. Coughlan was a member of *Theta Chi* social fraternity. He was a Diplomate

of the American Board of Surgery, a member of the American College of Surgeons, the Southeastern Chirurgical Congress, the Virginia Surgical Society and the Southern Medical Association.

In June of 1945 he married Anne Lewellyn, a graduate of the School of Nursing of the University of Maryland, also a member of the 142nd General Hospital. After the cessation of hostilities he returned to Baltimore and began the private practice of general surgery. He taught at the School of Medicine of the University of Maryland in the capacity of an Associate in Surgery. He was a member of the Visiting Staff of the University Hospital and the Church Home and Hospital and served as surgical consultant to the Western Electric Company.

In January of 1950 he left Baltimore to establish a practice in general surgery at Staunton, Virginia. He is survived by his wife, the former Anne Lewellyn, a daughter, Janet, aged 17, and a son, Stuart Gray, Jr., aged 13.

Despite his busy surgical practice, Dr. Coughlan found time to make his talents available in other areas. Always a sincerely religious person, he had been active as a Trustee of Faith Presbyterian Church in Baltimore. He continued his religious

activities as a founding member and Elder of the Covenant Presbyterian Church in Staunton.

He was an avid reader and was particularly interested in biographies and historical literature. Always interested in nature and the outdoors, he used every opportunity to enjoy fishing, walking, and bird watching. His interest in photography resulted in a collection of hundreds of 35-mm. slides which he loved to review with his friends. His love for fine music led to the collection of a select group of classical recordings to which he was content to listen for hours on end.

Always a perfectionist, he gave unstintingly of himself to his patients and would

not be satisfied with less than the greatest effort to produce the best results in patient care. His whole life was enveloped in the clinical practice of surgery and his sense of personal and professional responsibility to his patient's welfare was most acute.

Perhaps the words of W. B. J. Martin best express his sense of responsibility and of belonging: "I am never able to shake free of the knowledge that I belong to life, that I cannot contract out of it; and that I am responsible, not merely to myself, to my neighbors and friends, but to God. And when I am true to these points, everything else in my life becomes significant and right."

EVERETT S. DIGGS, M.D.

ALUMNI NEWS REPORT

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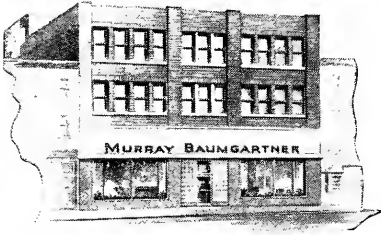
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University of Maryland

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Diagnosis and Therapy of Carcinoma of Vulva and Its Relation to Granulomatous Diseases

A 30 Years Survey

UMBERTO VILLASANTA, M.D., F.A.C.O.G.*

CARCINOMA OF THE VULVA is fortunately a very rare disease: the incidence being 1 case in every 44,556 women of all ages.¹⁴ Therefore, very few individuals can observe more than a score of cases and achieve satisfactory experience in the treatment of the disease. A periodic appraisal of cases occurring in a large institution is useful to evaluate results of different modes of treatment.

Material

This study concerned 55 cases of carcinoma of the vulva seen and/or treated in the Gynecologic-Oncology Clinic of the University of Maryland between the years 1935 and 1964. There were 3 cases of carcinoma in situ and 52 cases of invasive carcinoma. Of the latter, 4 originated from the clitoris (7.6%), 5 from Bartholin's gland (9.6%), and the remainder from the epithelium covering the labia. Forty cases of invasive carcinoma had 5 or more years of postoperative exposure (1935-1959). Only these will be considered for the evaluation of therapy, while all other data will refer to the total 52 cases of invasive carcinoma. Patients lost to follow-up are considered dead.

Two lesions originating from the Bartholin's gland were adenocarcinomas, the others were all of the squamous type.

Age. The youngest patient was a

Negress of 33 years and the oldest a white woman of 83. Average age was 57.1 years. Dividing the patients by race, it is noteworthy that the average age of white women was 65.4 years, and only 50.7 years for the colored patients. This difference of 15 years is statistically significant. Twenty-one of the 23 white women were past 50 years of age at the time of diagnosis, while 25 of the 29 colored patients were between 31 and 60 years old (Tables 1 and 2). There is a definite tendency for colored women to contract carcinoma of the vulva at an earlier age than white women.

Race. The white and colored patients were almost equal in number (23 and 29 respectively), while in the clinic population the colored females represent 77% of the total patients registered. This is difficult to explain, especially if one considers that venereal diseases are much more common among the colored patients and that a relatively frequent association of granulomatous diseases and carcinoma of the vulva has been noted.^{3,4,9,10}

Symptoms. The most common first symptom (Table 3) related by the patients was: a tumor or growth. This accounted for 45% of the first symptoms. The next most frequent complaint was pruritus (24%). In decreasing order of occurrence were: an ulceration or a sore (15%), bleeding (9%), pain (5%), and discharge (2%). If all symptoms are considered, disregarding the order of appearance,

* From the Department of Obstetrics and Gynecology, School of Medicine, University of Maryland, Baltimore, Maryland.

TABLE 1. INVASIVE CARCINOMA AGE IN RELATION TO RACE (52 CASES).

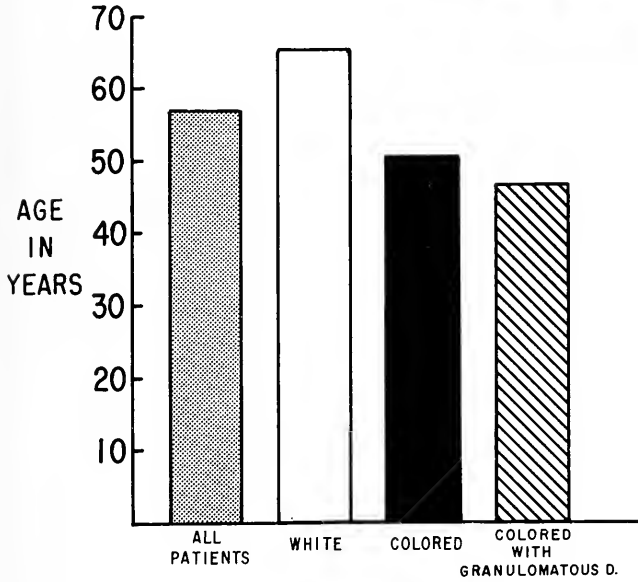
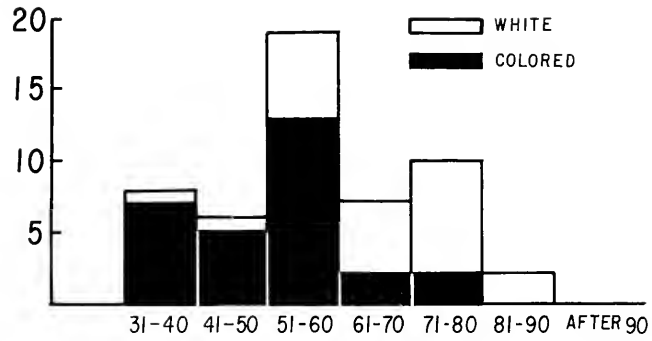
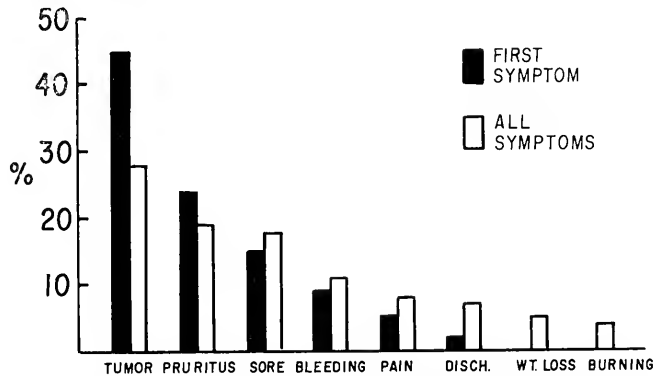


TABLE 2. AVERAGE AGE (52 CASES).

TABLE 3. SYMPTOMS OF INVASIVE CARCINOMA (52 CASES).



tumor or growth was still the most frequent (28%). In order were found: itching (19%), ulcer or sore (18%), bleeding (11%), pain (8%), discharge (7%), weight loss (5%), and burning (4%). Pain, discharge and weight loss were signs of widespread growth and

metastases of the tumor and, of course, became more apparent later on in the course of the disease.

Duration of Symptoms. Of the 52 patients with invasive carcinoma almost one-half had symptoms for less than 6 months (Table 4). About 15% had

Table 4. Duration of Symptoms (52 Cases).

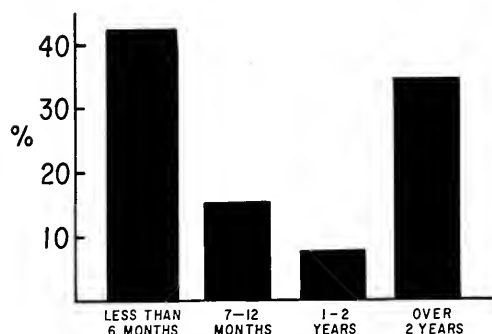


Table 5. Duration of Symptoms and 5 Years Survival (40 Patients).

	Dead	Alive
Less than 6 months.....	15	3
7-12 months.....	5	4
1-2 years.....	3	0
Over 2 years.....	6	4
Total.....	29	11

symptoms from 7 to 12 months, and 8% between 1 and 2 years. One-third had noticed some symptoms for over 2 years. It is apparent from Table 5 that the patient who had symptoms for a shorter period of time had paradoxically the worst chance of a 5 year survival.

Delay in Diagnosis. The interval between onset of symptoms and diagnosis varied between 2 weeks and 8 years. Over one-half of the patients had symptoms for more than 6 months before the first examination. About one-fourth had sought medical advice and were improperly treated for periods ranging between 5 weeks and 8 years (Table 6). In only 5 of the 52 patients a diagnosis was made within one month of the onset of symptoms. Therefore delay in diagnosis was found in approximately 90% of the cases.

Table 6. Duration of Medical Treatment Before Correct Diagnosis Was Made.

Duration	Diagnosis	Responsibility
2 months	Cond. Ac.	Clinic
2½ years	Cond. Ac.	Clinic
1½ years	?	Physician
3 years	Syphilis	Physician
3 months	G.I.	Clinic
3 months	?	Physician
1½ years	?	Physician
2 years	G.I.	Physician
6 months	?	Physician
7 months	L.G.V.	Physician
5 weeks	Syphilis	Clinic
5 weeks	?	Physician
4 years	L.G.V.	Physician & Clinic
6 months	G.I.	Clinic
8 years	G.I.	Clinic

Gross Appearance of Lesions

At the time of the first examination 26 were classified as ulcerative lesions, 21 as exophytic lesions or swelling; only 3 as leukoplakia and 2 as condylomata acuminata. In but 4 of the 52 cases leukoplakia was known to have been present prior to the diagnosis of malignancy.

Patients were divided according to the classification proposed by Taussig:¹² group I includes cases with no palpable nodes and lesion less than 3 cm. in diameter, group II tumors less than 7 cm. in diameter, group III larger lesions or lesions of any size with lymph node involvement, group IV tumors with extension to the vagina or suprapubic space or with fixed lymph nodes and group V advanced cases with distant metastases, cachexia, etc. In the present series, there is no correlation between the extension of the

Table 7. Taussig's Classification and 5 Years Survival (40 Patients).

Taussig's Group	Total	L. & W.	D. of Dis.	D. of Interc. Disease	L.T.F.U.
I	8	1	6	1	—
II	6	3	2	1	—
III	6	3	2	—	1*
IV	20	4	16	—	—
V	—	—	—	—	—
Total	40	11	26	2	1

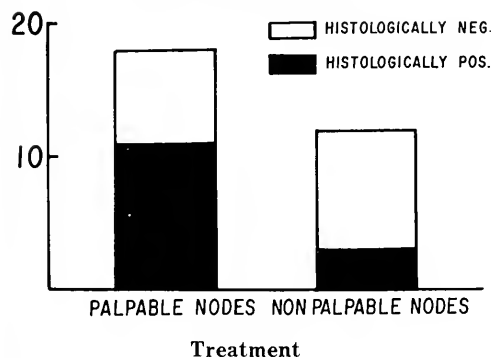
* After 4 years.

disease and increased mortality (Table 7).

In 23 cases inguinal nodes were not palpable. In 18, enlarged lymph nodes were felt bilaterally; in 8 on the left side only, in 3 on the right side only. The lymph nodes were available for histological examination in 28 cases.

There was only a fair correlation between gross and microscopic findings. Out of 16 cases where enlarged nodes were palpated in the groins, 11 showed histologically metastatic disease, but 5 were negative. Of the 12 cases without palpable lymph nodes, 3 had metastatic disease microscopically (Table 8).

Table 8. Correlation between Gross and Microscopic Findings.



Of the 55 patients only 2 were considered to have too far advanced disease to undergo any sort of treatment. Both died

less than a month after the diagnosis was made. Three had carcinoma in situ and were treated with radical vulvectomy without dissection of the regional nodes. The remainder were treated with a variety of procedures that can be divided in 5 main groups (Table 9). In the earlier years local radium application in the form of plaques or needles, supplemented by external irradiation and local excision of the neoplasm were commonly used. Later vulvectomy, total or unilateral, with or without unilateral lymph node dissection was attempted. More recently a radical treatment was employed, this consisting of radical vulvectomy and bilateral lymph node dissection, either as a single or a multiple operation. This has been the standard primary form of treatment in the past 13 years. There has been no operative mortality in 17 patients treated in this way.

Carcinoma in Patients with Granulomatous Lesions

Out of the total number of 55 cases, 11 were found in patients with granulomatous vulval lesions (an incidence of 20%): 10 cases in invasive carcinomas, 1 case in a patient with carcinoma in situ. Patients with a history of syphilis or with positive serological test for syphilis alone were excluded from this group. The aver-

Table 9. Results with Different Types of Treatment (40 Patients).

	Total	L. & W.	Dead of Disease	Dead of Other Cause	Lost to Follow-Up	5 Years Survival	
						Un-corrected	Corrected
No treatment	2	—	2	—	—	0	0
Irradiation (int., ext. or both)	7	1	6	—	—	14.3%	14.3%
Irradiation and local excision	11	4	7	—	—	36.4%	36.4%
Radical vulvectomy	5	—	5	—	—	0	0
Rad. vulv. + unil. node dissection	5	2	3	—	—	40.0%	40.0%
Rad. vulv. + bil. node dissection	10	4	3	2	1	40.0%	70.0%
Total	40	11	26	2	1		

Table 10. Pre-existing Granulomatous Disease.

Granuloma inguinale.....	4
Lymphogranuloma venereum.....	2
Condylomata acuminata.....	3
Syphilis (1 Chancre & 1 Gumma).....	2
Total.....	11

age age of these patients was only 46.9 years, in comparison with 57.1 for the total number of patients (Table 2). All the patients were colored. As for the type of granulomatous disease (Table 10), there were 4 cases of granuloma inguinale proven by positive smears for Donovan bodies, 2 cases of lymphogranuloma venereum as manifested by positive Frei test, 3 cases of condylomata acuminata and 2 cases of syphilitic lesion (1 chancre—1 gumma) proven by biopsy. Of the 11, 6 had positive serological tests for syphilis. The elapsed time between the diagnosis of granulomatous disease and the discovery of carcinoma varied between 2 months and 8 years. All these patients except 1 were under the care of a private physician or

Table 11. Lymph Nodes Involvement in Patients with Pre-Existing Granulomatous Disease.

	Not Palpable	Palpable
No treatment to node	3	1
Removal, no tumor found	3	2
Removal, tumor present	0	2
Total	6	5

the hospital's clinic prior to the diagnosis of carcinoma (Table 6). Lymph node involvement was palpated in 5 cases. In 4 the nodes were removed. In 2 cases they showed carcinoma; in 2 there was no evidence of malignant diseases. Lymph nodes were not palpable in 6 cases; in three they were removed and proved to be free of cancer (Table 11). These findings contrast with those of Saltzstein *et al.*¹⁰

It is difficult to evaluate the survival rate, inasmuch as only 6 patients were exposed for 5 years after treatment. Of these, 3 survived over 5 years, 1 died after 3 months, 1 after 1 year and 9 months and 1 after 4 years, all of disease.

Dermatologists, who see a large number of granulomatous venereal diseases, report only single cases in association with squamous cell carcinoma. The first cases of documented granuloma inguinale of the vulva followed by carcinomatous lesion were reported in the American literature in 1950,⁶ 1952,⁷ 1953,¹ and lymphogranuloma venereum followed by cancer in 1954.¹¹ On the contrary gynecologists report relatively large series of cases of squamous cell carcinoma of the vulva preceded by granulomatous venereal disease. Salzstein, Woodruff and Novak¹⁰ reported that 35% of their cases were associated with venereal diseases. Collins⁴ series showed 25% of the total to be associated with venereal diseases but 60% of all of his colored patients had venereal diseases. At the University Hospital granulomatous lesions were present in 20% of the cases, and in 35% of the colored patients. Pound and Lacy⁹ found that 47% of Negro patients with carcinoma of the vulva had either serologic or pathologic diagnosis of Lymphogranuloma venereum.

A very interesting finding is that if the granulomatous disease is associated with carcinoma, the lymph nodes, even though enlarged, are free of metastatic disease. Only 1 positive node out of 8 cases was found in the Salzstein, Woodruff and Novak¹⁰ series, while the percentage of positive cases is usually 50% or more. This is probably due to the sealing of the lymphatic channels by the granulomatous disease. In fact the lymph nodes are invariably grossly enlarged.

It is possible that chronicity of the venereal disease may predispose to carcinoma. The coexistence of the two processes is too frequent to be fortuitous.

A study of the epithelium covering these granulomatous lesions,⁹ especially in cases of L.G.V., will show at first hyperkeratotic changes, followed by dyskerato-

totic changes, like double nuclei, halo cells, loss of polarity, increase in nuclear/cytoplasmic ratio, bizarre mitotic figures, anisokariosis, nuclear vesicularity, hyperchromatism and basophilism of the cytoplasm, etc. All these criteria are diagnostic of carcinoma *in situ*.

We learn from this sequence of events that every granulomatous lesion in which carcinoma is not demonstrated by biopsy, and which fails to respond completely to specific therapy with return of all tissue to normal, is very suspicious of malignant degeneration, and can be adequately examined for malignancy *only when the entire vulva* is submitted to the pathologist for study by multiple sections. This is not only diagnostic, but prophylactic as well.

The proper handling of every granulomatous lesion of the female external genitalia should include (as proposed by Collins):⁴

1. dark field examination of scraping of the lesion for presence or absence of *Treponema Pallidum*
2. smear for Donovan bodies
3. Frei's test for L.G.V.
4. smear for Ducey's bacillus
5. serologic test for syphilis
6. biopsy, and, if this shows carcinoma *in situ*,
7. vulvectomy

Results

Of 7 patients who received Radium or Roentgen therapy alone or in combination, only 1, treated by X-ray, survived 5 years. Eleven patients had local excision of the tumor or simple vulvectomy in addition to Radium or Roentgen therapy. Of these, 4 patients survived 5 years. In five patients only vulvectomy was done and all later died of the disease. Of 5 others, who underwent vulvectomy with unilateral lymphadenectomy, 2 survived over 5 years. Ten patients were treated with radical

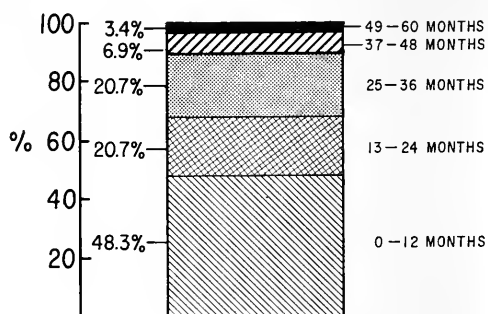
vulvectomy and bilateral lymph node dissection: 4 survived, 1 was living and well after 4 years and was subsequently lost to follow-up. One died two years later of carcinoma of the antrum with no evidence of recurrent vulval disease, one patient died 2 years later of cerebrovascular disease with no carcinoma found at autopsy and 3 died from the original vulval cancer (Table 9).

The uncorrected 5-year survival was 11 out of 40 patients or 29%. Taking into consideration that 1 patient was lost to follow-up and apparently free of disease 4 years after treatment and that 2 patients died of other disease with no evidence of the original carcinoma, the corrected 5-year survival rate comes to 37%, which is still much lower than the results claimed by Taussig¹² (58.5%), Collins⁵ (74%), Cassidy² (61%), Way¹³ (74%) and McKelvey⁸ (63%).

It is a curious observation that of the 11 patients living and well after 5 years, 3 more succumbed to the disease. One, originally in group I, died of metastases to the groin and brain 8 years after treatment. Of the group II, one died 7 years later of myocarditis and metastatic disease in the vulva and groin, and another 5 years and 7 months after treatment of local and groin disease. All 3 were treated with vulvectomy and X-ray. Three others died 6, 8 and 10 years respectively after treatment of stroke (1) and congestive heart failure (2) and at autopsy were found free of carcinoma. Their treatment consisted of radium and local excision in 1 case, and radical vulvectomy and unilateral lymph node dissection in the 2 other cases.

Reducing the survival time to 12-month periods (Table 12) it is obvious that almost 50% died within 1 year and about 70% within 2 years. Only 1 patient died

Table 12. Time of Death after Treatment (29 of 40 Patients).



3 years and another 4 years after treatment.

Thirty-nine of the 40 patients (97%) were followed for at least 5 years. One patient was followed for 4 years and at the last examination there was no evidence of persistent or recurrent disease.

Microscopic examination of lymph nodes was available in only 18 patients exposed for 5 years after treatment. The 10 patients with metastatic disease in the inguinal nodes all died of disease. Of the 8 patients with microscopically negative nodes only 1 died within 5 years, but of cerebro vascular disease, and at autopsy was found free of cancer (Table 13).

Table 13. Correlation between Metastatic Groin Disease and 5 Years Survival.

Nodes			
Positive		Negative	
Dead	Alive	Dead	Alive
10	0	1*	7

*Died of cerebro accident, no carcinoma found at autopsy.

Recurrence

Twenty-six of the 40 patients (65%) had recurrence of the disease. The sites of recurrence are summarized in Table 14. There seems to be no correlation between

Table 14. Stage and Site of Recurrence (26 of 40 Patients).

	Local Only	Local & Groins	Groins Only	Local & Dis-tant	Groins & Dis-tant	Dis-tant Only
Group I	3	—	3	—	—	—
Group II	—	—	1	1	—	—
Group III	—	—	—	2	—	—
Group IV	3	9	1	1	1	1
Group V	—	—	—	—	—	—
Total	6	9	5	4	1	1

Table 15. Type of Treatment and Site of Recurrence (26 of 40 Patients).

	Local Only	Local & Groins	Groins Only	Local & Dis-tant	Groins & Dis-tant	Dis-tant Only
Irradiation	4	1	—	1	—	—
Local excision & irradiation	2	2	2	2	1	—
Vulvectomy	—	2	1	1	—	—
Vulvectomy & unil. node dissection	—	2	2	—	—	—
Vulvectomy & bilateral node dissection	—	2	—	—	—	1
Total	6	9	5	4	1	1

Table 16. Type of Treatment and Percentage of Recurrence within 5 Years (40 Patients).

	No. of Cases	No. of Recurrence	Per Cent of Recurrence
No treatment	2	2	100
Irradiation only	7	6	85
Irradiation & excision	10	6	60
Vulvectomy only	5	5	100
Vulvectomy & unil. node dissection	6	4	66
Vulvectomy & bilateral node dissection	10	3	30
Total	40	26	65

the original stage of the disease and the place of recurrence.

The mode of treatment had a definite influence on the site of recurrence. Most of the local and/or groin recurrences were found following irradiation, local excision or a combination of the two. Careful study showed that recurrences were mainly distant, and beyond the reach of surgery. In 2 cases there was local and groin recurrence, but in both at the time of surgery there was metastatic disease present in the lymph nodes (Table 15). There is no doubt that the radical approach reduces significantly the percentage of recurrences (Table 16).

Summary

Carcinoma of the vulva is a rare condition. Only 55 patients with primary carcinoma of the vulva were seen at the University of Maryland Hospital between January 1, 1935 and December 31, 1964. Of these only 3 were in situ lesions, the others being invasive, and, of the latter, only a few originated from the clitoris or the Bartholin's gland. With the exception of 2 adenocarcinomas of the Bartholin's gland, all lesions observed were of the squamous type.

The average age was 57 years for the total number of patients, but it was significantly higher in the white women (65.4 years) and lower in the colored ones (50.7 years). It was even lower in colored patients with granulomatous disease: 46.9 years. In the local population carcinoma of the vulva was relatively more frequent among the white patients.

The complaints most commonly offered by the patients were in this order: presence of a tumor or growth, pruritus and "sore." The duration of symptoms varied between a few months and several years. There was no correlation between the duration of symptoms and the survival rate.

The patients and their physicians were equally responsible for a delay in making the diagnosis of malignancy.

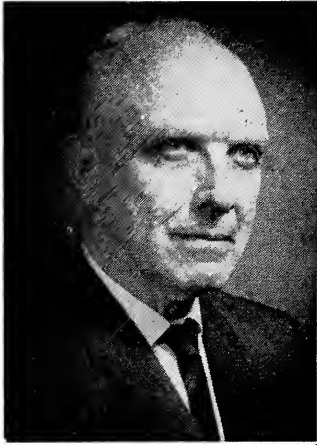
Leukoplakia was not found to be a frequent precursor of the malignant lesion, while venereal diseases were present in one-fifth of the patients.

There was no correlation between the extension of the disease and the survival. There was only poor correlation between gross and histologic findings in the lymph nodes. Not a single patient with metastatic inguinal lymph nodes survived 5 years. None of the patients with negative lymph nodes died of the disease.

The best results were obtained with radical vulvectomy and bilateral lymph node dissection: higher survival rate and less recurrences. In this small series there was no operative mortality.

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MEDICAL SCHOOL SECTION

Dean's **LETTER**

Dear Members of the Alumni and Friends of the Medical School:

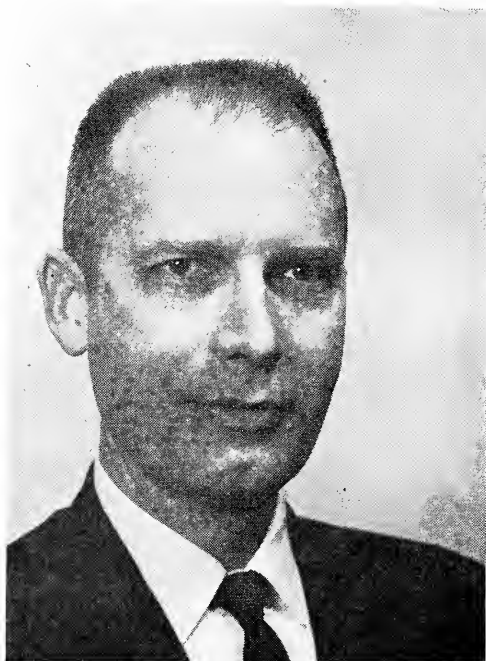
National legislation on the creation of "Medical Complexes" on a regional basis for improving the medical handling of heart disease, cancer, stroke, and other major disease problems appears to have considerable support for enactment into law.

Because of this possibility, and the fact that if enacted the medical schools will play major roles in the functioning of the medical complexes, it is important that realistic planning be undertaken by the medical school and the practicing profession.

As an initial step in planning, this medical school has made inquiries of the chiefs of staff of a number of community hospitals within the State of Maryland to determine if their professional staff desires to undertake a study with the medical school to determine what actions appear to be desirable in the handling of heart disease, cancer, stroke and other major diseases. Answers received to our inquiries indicate a wide interest in such a study and the medical school plans to conduct it during the summer and fall.

Sincerely,

WILLIAM S. STONE, M.D.
Dean



Dr. George N. Austin, New Orthopaedic Head

DR. WILLIAM S. STONE, Dean of the School of Medicine, has announced the appointment of Dr. George N. Austin as Professor of Orthopaedic Surgery in the School of Medicine effective July 1, 1965. Dr. Austin replaces Dr. Allen F. Voshell, who retired some time ago.

A native of Oklahoma, Dr. Austin received his baccalaureate degree in Zoology at the University of Oklahoma in 1940. Following a year of post-graduate research in Experimental Embryology, he was called to duty in World War II as an officer in the Field Artillery. From 1941 to 1946 he served actively, being separated as a Lt. Colonel. He then entered the University of Oklahoma School of Medicine, graduating in 1950. He served a rotating internship at the Walter Reed Army Hospital and a three-year residency in Orthopaedic Surgery at the Johns Hopkins Hospital under Dr. Robert W. Johnson, a member of the University of Maryland Class of 1912. This was followed by the practice of Orthopaedic Surgery in the United States Air Force Hospital at Tachikawa, Japan. Then followed other routine assignments in the Air Force, culminat-

ing in his appointment as Chief of the Orthopaedic service at the United States Air Force Hospital at Carswell Air Force Base, Texas, a post he held from 1958 through 1960.

Dr. Austin has held many consultant posts within the Armed Forces and several universities, the most recent being an appointment as Associate Professor and Chairman of the Section on Orthopaedic Surgery of University of Missouri Medical Center, a post which he has held since July 1962. Dr. Austin is a Diplomate of the American Board of Orthopaedic Surgery, a member of the American Academy of Orthopaedic Surgeons, the American College of Surgeons, the American Association of Military Surgeons, the Society of Air Force Clinical Surgeons, the American Academy for Cerebral Palsy, the American Medical Association, the Clinical Orthopaedic Society, the Mid-Central States Orthopaedic Society and the Southern Medical Association.

He is a member of Sigma Xi, Honorary Society, Phi Sigma, Phi Beta Pi and Nu Sigma Nu Fraternities. He is the author of numerous publications in the field of Orthopaedic Surgery.

PROMOTIONS

The following new promotions have been announced by Dean Stone.

DR. WITOLD E. KUCHARSKI has been named Assistant Professor of International Medicine.

DR. WILSON HEEFNER has been appointed Assistant Professor of Pathology.

DR. WILLIAM HICKEN has been named Assistant Professor of Pathology.

Promotions have been given DR. MARION C. RESTIVO, who has been named Assistant Professor of Radiology.

DR. CHARLES A. BARRACLOUGH has been promoted from Associate Professor to Professor of Physiology.

DR. JOHN GEORGE has been named Assistant Professor of International Medicine.

DR. ALBERT F. HECK has been promoted from Instructor in Neurology to Assistant Professor in Neurology.

DR. EDMUND D. MIDDLETON has been promoted from Assistant Professor to Associate Professor of Obstetrics and Gynecology.

Sir Hans A. Krebs, Alpha Omega Alpha, Lecturer

SIR HANS A. KREBS, Nobel Laureate and professor of biochemistry at the University of Oxford, England, spoke at the School of Medicine on May 19, 1965. Dr. Krebs' subject was "The Biochemistry of Ketosis," a subject to which he has extensively contributed particularly with regard to the metabolic pathways now known as "The Krebs Cycle."

1965 Alice M. Band Lecture

DR. PARK GERALD, Assistant Professor of Pediatrics at the Harvard Medical School, spoke on March 10, 1965, on the subject "Newer Genetic Aspects of Hemoglobin Formation."

DR. JOHN C. KRANTZ TO RETIRE

DR. JOHN C. KRANTZ, Professor of Pharmacology in the School of Medicine, has announced his retirement effective September 1, 1965.

A committee of faculty and friends of Dr. Krantz has been named and is at work planning for the formal retirement ceremonies which will be held in Baltimore on September 24, 1965.

According to Dr. Edward Truitt, Professor of Pharmacology and chairman of the testimonial committee, events will include the presentation of an oil portrait of Dr. Krantz and a testimonial dinner. Additional details will be forthcoming as the committee develops the program.

Friends and alumni will receive a solicitation for contributions to the portrait as well as to other aspects of the testimonials to be offered the School of Medicine as an honor to one of its illustrious and distinguished professors.

On June 15, 1965, Dr. and Mrs. William S. Stone entertained members of the faculty at their home in honor of Dr. and Mrs. John C. Krantz and Dr. and Mrs. Dietrich C. Smith, Dean Smith also retiring from his duties at the School of Medicine on the same date.

Medical History Society Organized

A MEDICAL HISTORY SOCIETY was recently organized under the sponsorship of the School of Medicine's Chapter of Alpha Omega Alpha, honorary medical fraternity cooperating with the Student Council. It is planned that meetings will be held during the academic year at which time various papers concerning medical history will be presented.

At a meeting on April 2, 1965, Dr. Robert W. Buxton spoke on the work of Dr. William Beaumont, prime investigator in the study of the digestive process in the human subject.

Faculty

NOTES

Department of Medicine

DOCTORS THEODORE E. WOODWARD and FREDERICK R. MCCRUMB, JR., are listed as contributors in the new Cecil-Loeb Textbook of Medicine (eleventh edition).

Department of Dermatology

THE DIVISION of Dermatology of the School of Medicine will be represented at the American Academy of Dermatology Meeting in December 1965, the following members of the Department participating: Dr. Harry M. Robinson, Jr., Dr. Francis A. Ellis, Dr. Raymond C. V. Robinson, Dr. Joan Raskin, Dr. Mark B. Hollander and Dr. Joseph Warren Burnett will present either exhibits or scientific papers. Dr. Harry M. Robinson, Jr. presenting an exhibit on Tolnaftate at the annual meeting of the American Medical Association in New York.

Dr. Joseph W. Burnett has joined the Staff of the Division and is actively concerned in basic research as applied the problems in dermatology.

Department of Pathology

DR. HARLAN I. FIRMINGER, Professor of Pathology, has been named a Director-at-large in the newly formed Universities Associated for Research and Education in Pathology (UAREP), an organization which has superseded the American Registry of Pathology. The newly formed organization will have offices in the buildings of the Federation of American Societies for Experimental Biology at 9650 Wisconsin Avenue, Bethesda, Maryland.



**Sidney Butler
Retires**

MR. SIDNEY BUTLER, mail clerk since 1940, retired on May 1, 1965. Known to several generations of students and faculty, Sidney has been very proud of the fact that he has known so many physicians and has been able to keep abreast of their many movements not only within the school but throughout the nation and the world. A most efficient, competent, reliable, and conscientious member of the classified staff, Sidney has earned his retirement but will be missed among the faculty.

The Bulletin Gets Around

From Prof. M. W. Woerdeman, Editor in Chief of *Excerpta Medica Foundation*, comes the following:

Once again we would like to express our very sincere thanks for the great help you have extended to *Excerpta Medica* by providing us with a copy of your very valuable journal. It goes without saying that we wish to continue abstracting this journal in 1965 and thus bring its important contents to the attention of the scientific world.

Regretful Error

In the BULLETIN of the School of Medicine Volume 50 No. 1 (Page xvi), the name of Joseph Shapiro was misspelled. The BULLETIN regrets the error.

Charles Reid Edwards 1888-1965

ON FEBRUARY 1, 1965, Doctor Charles Reid Edwards died at the University of Maryland Hospital in Baltimore. Doctor Edwards was born on September 19, 1888, at Medley, West Virginia. The latter half of the 19th century in which he was born was that extraordinary period in the United States when medicine was entering its flamboyant adolescence and when surgeons like John Benjamin Murphy in Chicago, George Thomas Morton in Philadelphia, Charles McBurney in New York and the Mayo Brothers, William and Charles, were at their extravagant best. 1888, too, was the year when Sir Frederick Treves, in London, removed for the first time, a chronically infected appendix; and perityphlitis, as it was called, was the "surgical conquest" through which many of these men strode to fame.

Probably none of this was known nor could it have been interesting to the lad from Medley, West Virginia, but by the time he had graduated from the University of Maryland School of Medicine, in 1913, many of these men were still the proud and great names in American Surgery and some were known personally to him.

Few if any of the young men entering Medical School at this period had preliminary college education and Reid Edwards was no different. After completing high school in Adamstown, Maryland, he entered Medical School and received his M.D. degree in 1913. He was one of five students to receive a certificate of honor for scholastic excellence, at the time of graduation.

Among his classmates was W. Houston Toulson, later to become Professor of Urologic Surgery at Maryland. Among his instructors in the Department of Surgery, his senior year, were Randolph Winslow, Professor of Surgery, Arthur M. Shipley, Professor of Surgical Pathology, Frank S. Lynn and Fred Rankin, Instructors in Surgery.

During his senior year, because of his scholastic achievements, Doctor Edwards was appointed "Houseman" as was the custom at that time; then followed his Internship, and his Residency. From 1915 to 1917 he was Resident Surgeon at the Kernan Hospital for Crippled Children. Here he learned not only Orthopedic Surgery under Doctor R. Tunstall Taylor but exercised some of his administrative ability as "Superintendent" of the 62 beds then comprising the Kernan Hospital. He was appointed Assistant in Orthopedic Surgery in 1916.

Like most young men then in training, Doctor Edwards must have been fearful that the war, World War I, would be over and won without his help, and without affording him a large experience in the treatment of trauma. He entered the Army in 1917 as a First Lieutenant and after going overseas served for several months with the French in Belfort, France, at the Hospital Central. This must have been a unique experience.

Upon discharge, Captain C. R. Edwards returned to the private practice of Medicine and to his duties in the Medical School, in the Outpatient Department and on the Wards. He rose through the various grades in the Department until he was made Clinical Professor of Surgery in 1931. Upon the retirement of Doctor Arthur M. Shipley in July 1948,



CHARLES REID EDWARDS, M.D.



Doctor Edwards became Professor of Surgery and Acting Head of the Department.

During much of his life Doctor Edwards was known as a physician's surgeon; he was always a smooth, composed, rapid, almost faultless technician and out of the Operation Room an imposing, capable and confident physician. His knowledge and ability often led him into new or lightly traveled pathways, and about the University Hospital he was known for his many "firsts"—the first gastric resection, the first surgeon to remove the gall bladder from above-downward (isoperistaltic), the first to do the Bancroft operation (removal of mucous membrane from remnant of pyloric antrum) for gastrectomy, the first pancreatectomy (Whipple), and the first double-barrelled (split) colostomy. He was the first to try lumbar sympathetic ganglionectomy for several

diseases. He was a staunch believer in aseptic intestinal anastomosis techniques and continued to use these until he ceased doing operations. His great capacity for work, his fine intuition, and his tactfulness and truthfulness as a surgical consultant brought him many friends among both physicians and patients. In 1957 the University of Maryland Medical Alumni Association awarded its Gold Key to Doctor Charles Reid Edwards "for his outstanding contribution to medicine and his distinguished service to mankind."

Doctor Edwards' 15 medical papers dealt exclusively with clinical problems; his interest and his strength as a teacher lay in clinical training and clinical experience; his bedside teaching was unsurpassed. He had great interest and much skill in the acutely injured patient and for many years was an active, vigorous mem-

ber of the Society for the Surgery of Trauma.

Doctor Edwards was always interested and prominent in civic affairs, but, particularly, those relating to physicians in this community. In 1962 he was made Chairman of a committee whose work resulted ultimately in the reorganization of the Baltimore City Health Department. In the course of his career he was President of the Baltimore City Medical Society and President of the Medical and Chirurgical Faculty of Maryland. At the time of his death he was President of the Trustees of the Endowment Fund of the University of Maryland Medical School.

In addition to being a Fellow of the Southern Surgical Association, he was a Fellow of the American Surgical Association and the American College of Surgeons, serving for some time as

a Governor of the latter. He was a member of the Southeastern Surgical Congress, the American Association for the Surgery of Trauma, the American Medical Association and the Society for Clinical Surgery.

Doctor Edwards interested himself keenly in student affairs and for several decades was the Consultant-Father of the *Nu Sigma Nu* Fraternity. The fraternity owes much to his help and support.

It has been said that a really great man is known by three signs—generosity in design, humanity in execution, moderation in success. By these criteria Doctor Charles Reid Edwards was a truly great man.

ROBERT W. BUXTON, M.D.

HARRY C. HULL, M.D.

WILLIAM H. TRIPPLET, M.D.

The President's Commission Report on Heart Disease, Cancer, and Stroke: Implications for Physicians' Practice

MAUREEN HENDERSON, M.D.

THE PRESIDENT'S Commission on Heart Disease, Cancer and Stroke presented its report to the President in December, 1964. The President had asked the members of the Commission to tell him how to reduce the incidence of these diseases that account for more than 70 per cent of American deaths.¹

The first set of recommendations were "designed to bring together the best in medical care and the best in medical research, region by region across the nation."² There were three major recommendations:

1. The development of a number of regional centers that would stress fundamental and clinical research and teaching. These centers would provide some patient care but their primary function would be that of a regional resource for existing medical services. Sixty centers were recommended.

2. The second recommendation was for a number of diagnostic and treatment stations. These stations would be developed in existing university and community hospitals. They would be closely associated with the regional centers, and they would serve to carry the latest medical skills and facilities to local physicians and their patients.

3. The third recommendation was for the development of medical complexes whereby university medical schools, local hospitals, and other local health agencies would work together on a basis that

would utilize local health resources to maximum advantage.

Many members of the medical profession feel that implementation of these particular recommendations would have a serious effect on traditional methods of medical practice. The BULLETIN has tried to summarize the intentions of the Commission towards the practicing physician and the reservations of practicing physicians who have read the report.

The Intentions of the Commission:

The intention of the Commission Recommendations and their possible and probable effects can only be understood within the context of patterns and trends in contemporary American medicine. The most relevant trends are a shortage of physicians; an increase in specialization of physicians; an increase in the proportion of health care given within institutions; an increase in third party and prepayment systems of medical care; and an increase in public demand for health care as opposed to treatment of illness.

The Commission emphasized the shortage of physicians and the relative inadequacy of systems serving physicians in terms of communication of knowledge.

The recommendations themselves reflected the opinions and suggestions of an impressive number of experts who gave testimony before sub-committees. The first report lists over 170 experts and 60 health agencies. Practicing physicians and their representatives were among the experts.

The Commission tried to make its attitude towards practice very clear in its introduction to its first set of recommendations: "The purpose of the entire system is to assist the doctor in practice in the care of his patient who is suffering from heart disease, cancer and stroke. It will make available to every doctor in the country the newest and most effective diagnostic methods and the most promising methods of treatment." Later in the report the Commission said, "This proposal does not in any way effect the normal methods of payment of care such as direct payment by patients, third party payments through private insurance, public welfare payments, and other sources."

The Commission wanted to get a product to the consumer through the traditional channels but it wanted to speed up delivery. It also wanted to make the public aware of its product so that the consumer would play his part and go to the store to buy it when he needed it. Besides speeding up delivery, the Commission hopes to use available manpower to the best advantage and to avoid wasteful re-duplication of services and facilities.

The manpower problem was seen as a real issue in the development of new programs. The Commission tried to prepare for this issue by urging support of medical education and the most productive use of physicians. It made recommendations about training of supportive personnel with this in mind.

The Commission was very aware that the most advanced diagnosis and treatment of any one of these three diseases often calls for the skills of a multi-disciplinary team and that one physician cannot give "available care" when it requires a team to do this. The Diagnostic Stroke Clinic in University Hospital provides an example. The staff of this clinic is made up of cardiologists and neurologists with

an ophthalmologist, a cardio-vascular surgeon, and a psychiatrist close at hand. This team can solve problems that any single member of the team may not even recognize.

There was general recognition within the Commission that the new tools of the trade are complicated and hard to master and the report suggested instructors and learning time for practicing physicians. No physician should be ashamed to admit that he has to learn to use these new implements. The interns and residents in Intensive Care Units make casual use of equipment that many of their former instructors have not handled.

Diagnostic and treatment stations were to be the immediate source of information and on-the-spot-learning for practicing physicians. They would provide the technical supporting services for such procedures as cancer chemotherapy and blood coagulation control (among many others). They would be staffed with instructors and with supporting staff until the local staff had developed skills and no longer needed their help. The designated centers were seen as prototypes of units that would eventually be developed through local initiative in all communities throughout the country. These local units would reach peripheral physicians and the public through disease registries, continuing medical education, and public education programs.

The know-how of the local unit would be kept up to date through its association with the regional center and through its participation in regional center programs, particularly clinical trials.

Ongoing clinical studies would bring potential treatments and diagnostic measures to the everyday notice of practicing physicians even before they were accepted into routine use. Through his patients included in clinical studies the practicing

physician would be in direct touch with research teams in the regional center.

A practicing physician would have ready access for his patients to diagnosis and treatment beyond that available in his unit through the open channel between his unit and the regional center.

The inclusion of the cost of care for patients in clinical research and clinical demonstration programs seemed to be a necessary developmental requirement to members of the Commission.

The Commission made several recommendations to help physicians in practice:

A) Recommendations for support of medical education and training of ancillary personnel so the current physician load (overload) would be reduced.

B) Recommendations in support of improved and specific communications to physicians.

C) Recommendations for improved community services for the care of patients with chronic diseases and for more long-term facilities.

D) Recommendations for increased laboratory services, rehabilitation services, screening programs, and demonstration programs.

E) Funds for research into methods of practice. Funds for special research programs such as an epidemiological unit which could be organized and enjoyed by practicing physicians. The epidemiological unit of the British Royal College of General Practice is such a unit. Through it men in practice take part in productive research as they carry out their daily work and those who engage in studies find them very stimulating and rewarding.

Interpretations of the Recommendations:

The Commission report stated that "men and women are dying who need not die, not for lack of scientific knowledge but for the lack of the right care at the right time."

The American Medical Association interpreted this statement as an opinion based on emotion, not facts, and one that criticized the practicing physician.³ This criticism emphasized a national lack of accurate information about methods of practice throughout the country and called into account the total information found in a national search of published and unpublished data.

The Academy of General Practice saw that the Recommendations would put an immediate strain on an already strained supply of physicians and quite rightly predicted that increased opportunities for physicians and physicians-in-training were more likely to reduce the supply of physicians in the community than any other branch of medicine.⁴ They felt that the development of new "specialty areas" could attract even more graduates into specialization and accelerate the relative decrease in "first contact physicians" even though the number of new physicians increases.

It has been suggested that emphasis on three diseases could eventually bring public demands for similar standards of care and similar facilities for other diseases. Physicians see a danger in governmental response to these demands and the provision of government supported care for all diseases. Again, they ask the following question: if a patient with heart disease is in a clinical trial and gets free care—who pays for his care if he gets Parkinson's disease or diabetes while he is in the program?

A picture has been drawn of a growing body of physicians who have been Federally supported medical students; who have had clinical research training supported by Federal Fellowships; and who are in full-time appointments in Federally supported regional centers or who are full-time directors of medical education

in local Diagnostic and Treatment Centers. There is some concern that a group with this background may not share the philosophy and principles of traditional private medical practice.

Another concern of the American College of Physicians is that the proposed magnitude of support for three diseases is likely to spoil or prevent the development of well-rounded health services.⁵ One envisions a complete reversal of the present situation to a world in which all strokes are admitted to acute hospitals, and pneumonia and diabetic comas have to be treated at home.

Some physicians in practice see a danger of patient seduction to study and demonstration programs in regional centers and diagnostic and treatment units where the cost of care is covered by the programs. The provision of patient care costs within research and demonstration programs is open to abuse and it is possible that a cardiologist could call every patient who goes into an intensive care unit a demonstration case. The institution, the research physician and the awarding body have to be responsible for use and not abuse of this provision.

The legislative proposals that have come out of the report to-date are in support of of medical libraries,⁶ medical education⁷ and the development of regional complexes.⁸ The latter proposal is for support

for the organization of current community health services into loosely associated regional units, each unit including a medical school, a research institute, and community hospitals and agencies. Theoretically, this type of organization should use regional manpower, skills, and facilities to the best advantage. Some practicing physicians are, however, reluctant to propose their community hospital for a group with a medical school member. These physicians feel that past medical school performance has demonstrated self before community interest and they naturally feel that the care of their individual patients must take priority over research and teaching commitments. Other physicians feel that a true commitment of medical school and university hospital facilities to the health care and promotion of their local community is perhaps the most immediately attainable recommendation made by the Commission.

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Book Reviews

Clinical Hypothermia by Emil Blair, M.D. 272 pp. McGraw-Hill, Inc., New York, N. Y. 1964.

In this small book the author has undertaken the difficult assignment of describing a medical adjunct which is both tremendously complicated in its basic physiology and poorly understood in its clinical applications by most physicians. The large benefits to be gained from hypothermia by the basic scientist and the clinician, however, make it imperative that a wide variety of general physicians and specialists have a practical knowledge of the background and usefulness of this technique.

The author's definition of clinical hypothermia is "a state of adjustment to cold modified by drugs," and in the first major section of the book he details the physiology of this adjustment. He describes the mechanisms of temperature regulation and their reactions to thermal changes. Then in great detail he presents a remarkably complete account of the reactions of the individual organ systems in their response to graded hypothermia.

The urgent theme of this book is that hypothermia is not a specific therapeutic technique but an adjunct in the treatment of sick patients to allow the more favorable outcome of biologic defenses or medical intervention. In the second large section of the book on clinical applications, this theme is constantly reiterated as the author describes the rationale and usefulness of hypothermia in cardiovascular surgery, neurologic surgery, shock, and other fields. There is a brief but informative section on accidental hypothermia.

The final section deals with practical details of the methods, materials, and complications of specific techniques. The book is well produced throughout, and tables and illustrations are extremely informative and handy. Finally, the bibliography is voluminous and the index very useful.

Through his authoritative command of the

subject and his pleasant, breezy writing style, Dr. Blair has been completely successful in achieving a palatable as well as instructive exposition of hypothermia. This book must be read by specialists and house officers who employ hypothermia and can also provide a survey of the technique for the general knowledge of others.

LEE RUSSO

Enzymes in Blood Plasma by Benno Hess. 179 pp. Academic Press, New York, N. Y. 1963. \$8.00.

This book is a guide to the understanding of the why and how of enzyme tests performed with the blood plasma of patients. Such tests are now increasing since it had been found that many enzymes either appear in blood plasma or that their concentrations in it are altered as a consequence of organic disorders. The occurrence of enzymes in different organs and their location within the cell are described and tabulated. Their "leakage" into the blood stream and their kinetics are then discussed. Enzymes, which show substrate specificity, can be further classified by their organ specificity and tests for organ-specific enzymes are now widely used in differential diagnosis. The author discusses the principles of iso-enzyme measurements. The chapters of the book which deal with fundamentals are outstanding in their lucidity, comprehensiveness, and conciseness. The section on the pathological and clinical significance of enzyme determinations is well brought up to date, and among the references are listed 14 comprehensive reviews and 573 original papers. The subject index, however, is inadequate, *e.g.*, diseases of the kidney are listed in it, whereas diseases of bone have been omitted, although they are dealt with in the text. Moreover, the index contains several misprints.

This book is recommended to clinicians and to researchers for first orientation, as well as for reference.

Mechanisms of Demyelination by Augustus S. Rose and Carl M. Pearson, Editors. Pp. 247, McGraw-Hill Book Company, Inc., New York, 1963.

This small volume presents the proceedings of a conference held at the UCLA Brain Research Institute in 1962. Each chapter is a transcript of the formal paper given by the invited speakers and the informal discussion that followed. Chapters 1 and 2 are devoted generally to normal myelin, structure and chemistry, with 6 of the remaining 8 chapters being devoted to various experimental forms of demyelination. There is great emphasis on Experimental Allergic Encephalomyelitis and the hypersensitivity and immunologic aspects of demyelinating disease. The last two chapters are devoted to a presentation of clinical cases and a panel discussion which ranges over the entire subject. The papers are liberally illustrated with ultramicrographs, conventional photomicrographs, drawings, tables and graphs. Each chapter is well referenced. The volume includes not only the most recent information available at the time, but also each chapter begins with a statement of the most basic principles involved.

This makes the book of value to not only the more sophisticated reader but also the student and resident just beginning to read in the field.

HOWARD M. WISOTZKEY, JR., M.D.

Aetiology of Diabetes Mellitus and its Complications edited by Margaret P. Cameron, M.A., and Maeve O'Connor, B.A. Little, Brown & Co., Boston, Mass.

This volume is a series of symposia on the causes of diabetes and its complications. The articles are well written by international authorities and obviously will be a valuable source of information.

However, there is very little practical information in the book which will increase the efficiency of the physician in taking care of his diabetic patients.

The publication is part of the Ciba Foundation's Colloquia on Endocrinology and marks Volume XV of this series. It is recommended as a reference text.

The frontispiece has a very attractive picture of Dr. C. S. Best.

T. NELSON CAREY, M.D.

Prognostics, Predictions and Plans

WHILE THE BULLETIN summarizes certain highlights of the past 50 years of its publication, certain members of the faculty and alumni have been asked to predict what the future of their specialty might hold for the next 50 years. Readers of the BULLETIN in 2015 will be the judge of the accuracy of these predictions. That science and Medicine are rapidly moving toward important solutions is certainly reflected in the past 50 years of the BULLETIN. We hope the thoughts of these serious scholars will be interesting and provocative. Their validity and accuracy will have to wait.—Ed.

Dermatology

THE MAJOR PROBLEMS to be conquered in the field of dermatology are too numerous to mention individually. Improvement in the knowledge of the basic sciences applied to dermatology will bring new diagnostic measures which will inevitably lead to discovery of the etiologic agents of psoriasis, pemphigus vulgaris, dermatitis herpetiformis, cancer and other conditions for which no specific causative factor has as yet been found. Undoubtedly, new and more specific methods of treatment will be developed for the management of conditions which have been resistant to present methods. A hope for the future is the disappearance of empiric therapy.

HARRY M. ROBINSON, JR., M.D.
Professor of Dermatology

Infectious Diseases

INFECTIOUS DISEASES are still with us. Fifty years hence, they will still be with us. The animalcula, despite predictions, have weathered the "Antibiotic Era." True, magic bullets directed at specific critical metabolic sites with increasing accuracy will become available but new diseases and new problems in old diseases will offer frontiers for infectious disease research. Essential links in the chain of pathogenesis, in addition to being broken by drugs directed against the microbe

per se, will be therapeutically and prophylactically parted by application of knowledge of ecologic interplay among parasites and between pathogen-host at not only the cellular but also at the molecular level.

Similarly, advances in biochemistry will allow rapid analysis of protein structure so that minute differences in antigens and their antibodies may be detected and measured chemically rather than immunologically. Antibodies, as well as substances contributing to man's natural immunity, will be synthesized and used to artificially bolster resistance. Finally, it is to be hoped that man, through ignorance, will not set the stage for pandemic plagues but, through intelligent action, will use methods already at his disposal and those yet to be devised to eradicate major diseases from the world.

MERRILL J. SNYDER, PH.D.

Internal Medicine

MORE PHYSICIANS will be trained in Internal Medicine as the number of medical school graduates continues to increase. The Internist will spend more of his time as a personal physician. Because the Internist is to a great extent hospital oriented, he will more strongly influence policies and practices of hospitals in the future. As the population grows, hospitals will increase in size rather than in number, and as a result more extensive diagnostic facilities will be pos-

sible. Ultimately, Internists with special interests will group together at these hospitals to form the nucleus for the development of outpatient diagnostic clinics. At the medical school the application of knowledge and skills will be increasingly emphasized while at the same time development of new knowledge and a scholarly atmosphere will continue to grow.

EDWARD F. COTTER, M.D.

Neurobiology

I have been struggling quite conscientiously with the problem you presented to me in your recent requests for a statement regarding the future of my field of interest.

Obviously, much could be said about this in the privacy of our favorite oyster or other type bar, and it would be fun. On the other hand, I am not sure that many people would consider it fun if they read it in an official publication. In fact, I suspect that a rather simple way of putting one's head in a noose with one's colleagues would be to write what one actually thinks about many things. Inasmuch as speculation in print is not the most satisfactory sort of communication in the world anyhow, I have become somewhat disenchanted with the idea of doing it. At best, if my speculations should ultimately prove to be correct, I will be too dead to know about it; at worst, I very shortly could be hung by my own petard!

With thanks and admiration for your attempt, would you be good enough to allow me to beg off? I hope so.

ROBERT G. GRENELL, M.D.

Obstetrics

PRENATAL CARE and deliveries will be done by nurse-midwives under physician supervision. Endometrial biochemistry will be so well controlled that there will be a marked reduction in abortion and perinatal mortality, causing an excess of males, lack of wars permitting, but predetermination of sex will balance the sexes. Prematurity will become a rarity, reducing mental retardation. The study of genes will replace the study of chromosomes and with improved pharmacology, congenital anomalies will essentially disappear, the hydrogen bomb permitting.

Gynecology will be for the most part a

medical specialty with more sophisticated hormonal therapy of all types. Immunization against genital cancer of all types will eliminate this disease. Tissue repair following childbirth will be accomplished by nutritional and biochemical supplements.

Many of the preventive measures will begin when the patients are children and the most important specialty will be pediatric gynecology.

D. FRANK KALTREIDER, M.D.

Pediatrics

I FORESEE a marked change, the signs and symptoms of which are already apparent. Although one of the youngest children of Mother Medicine, she has grown rapidly to adult stature. The specialty is already basically dependent on the newer knowledge of the Present and Future in the sciences of biochemistry, virology, cytogenetics, endocrinology, anthropology, etc. And yet, underlying all this progress of the newer knowledge gained by the so-called allied sciences, there will always be the clinician, the practicing physician, as exemplified in Olser, Finney, Arthur Shipley, Gordon Wilson, the Friedenwald brothers, John Ruhrah, and their like, to administer to the ill.

SAMUEL S. GLICK, M.D.

The Changing Nature of Experimental Pathology

DURING THE PAST decades the so-called experimental pathologist has concerned himself with the morphologic and functional sequences accompanying pathological processes. The evolutionary history of the discipline of experimental pathology has been that of attempting to mimic a human pathological process in a convenient animal, so that unusual analytical procedures inappropriate for study of humans could be used, or observations of pathological changes as a function of time could be done. So long as the processes studied are prevalent in most of the animals studied as well as most humans, not only does much useful information obtain, but also considerable significance can be attached to these findings as they apply to the natural history of pathologic processes, whatever the species. Thus, implied in this

type of artificially invoked pathologic process is substantial uniformity in the host response to the invoking agent, both within and between the individuals. Such an implicit assumption has obtained for example in studies of a process such as the inflammatory response. Inflammation is a response common to all species, and study of its intricacies by way of animal models has relevance to humans, since it essentially represents the course of events throughout Nature.

In a vast number of experimental models attempting to mimic disease, the tacit assumption of host uniformity exists. Indeed, if individual differences among animals produce inordinately perplexing results the experiments may be abandoned. On the other hand, experimental studies of this kind which record the similar reactions or alterations displayed by animals to disease stimuli have yielded abundant fundamental information concerning the nature and sequences of these reactions. But the extension of this information to natural disease evolution may be unsuitable, since disease, in whatever species, usually evolves on the basis of individual host differences in a population and the conflict to one degree or another of these relatively few unfortunate individuals with incompatible elements of the environment such that disease ultimately ensues in a minority after variable attempts at compensation. Thus an important attribute of diseases in the mid-twentieth century is that they are recognized principally because of innate differences in individuals of a population in a rather common environment.

To reproduce this important attribute in an animal disease model is frequently expensive and almost prohibitively time consuming. It requires large enough populations of animals maintained for protracted periods of time such that the appropriately diseased minority may evolve and be studied.

To this type of disease study I feel the experimental pathologist will increasingly direct his attention. An important conceptual foundation and framework has been and continues to be formulated by other scientists such as the microbial geneticist; and using as starting points these ideas of host variability in regulation and homeostasis as applies to microbes the experimentalist can devise models and methods to explore the mechanisms of phenotypic expression in na-

turally or artificially evolving disease which arises on the basis of individual differences.

These explorations will assume many forms and use many techniques, often requiring the cooperation and collaboration of colleagues with interests and technical abilities in other methods than those usually ascribed to the pathologist. But this is only the naturally following detail, which must occur, but whose form and "terrain" cannot be set forth in any detail.

More important is the overall shift in emphasis toward seeking models which mimic disease as it occurs naturally; for only in this fashion can a truly rational knowledge of disease reality be acquired, and only in this fashion can rational therapy be forthcoming.

PETER RASMUSSEN, M.D.

Physical Medicine and Rehabilitation

THE NEXT 50 years will see an expansion of the concepts and techniques of rehabilitation into all areas of medicine. Emphasis will shift to the whole man and his environment and away from disease entities per se. There will be an accelerated development of paramedical specialties to assist the physician in the ever broadening expanse of comprehensive medicine, and the use of electronic equipment in diagnosis and therapy will markedly increase. The physician of the future will learn to accurately evaluate function in his patients, to proficiently assess the effects of disease on total function and to relate function to performance. He will learn to make maximum use of the skills of the paramedical specialists in both evaluating and treating his patients. And gradually the individual practitioner of medicine, in a one to one relationship with his patient, will disappear and a team concept of diagnosis, evaluation and treatment will evolve.

PAUL F. RICHARDSON, M.D.

Psychiatry---2015

WE CAN EXPECT that by 2015 man will have solved most of the riddles of neurochemistry, neurophysiology, and genetics. He will have chemicals and atomic rays that will alter, transiently or permanently, in a predictable manner, such ethereal things as

drive, mood, and thinking. But whether all this will have solved the problem of mental illness is moot. We know history repeats itself: as one problem is solved, man creates others for himself. Therefore, in fifty years, he will have returned to concerns about such esoteric psychological problems as child rearing practices, preservation of the individual and the family, and what to do for all the healthy senior citizens with senile psychoses.

VIRGINIA HUFFER, M.D.

Radiotherapy

THE PROJECTION of 50 years in the future of a specialty which is changing at a quick pace such as radiotherapy is not only difficult, but it is impossible. Let us remember that it was 50 years ago that radiotherapy had its inception, stepping into the field of cancer therapy with very uncertain or wobbly steps. However, there are certain facts that will allow us to elaborate about the possible developments in the future of radiotherapy. There is no imagination that can predict the type of x-ray or other ionizing ray generators that will be in use in the next 50 years. Electronic engineers, physicists and mechanics are continuously going ahead of the clinicians in the development of such apparatus. Most sophisticated equipment which will automatically center into the area invaded by tumor will be used. Plans of treatment and patterns of treatment guided by computerized programs will be routine in every treatment. The dosimetry and analysis of results and even the choice of the right treatment will all be guided by computers.

In the next ten years preoperative irradiation in many tumors will allow a more complete and radical treatment for advanced cases resulting in a considerable increase of their cure rate.

The developments in the research laboratories in the field of radiobiology will change our present regime of treatment by irradiation. Present day treatment for several weeks will be replaced by a single, more specific irradiation. A combination of irradiation with chemotherapeutic and hormonal agents will allow us far better treatment with less reaction to the patient and more specific destruction of the tumor. It is possible that

in the future radioactive isotopes will be developed which will selectively irradiate cancer cells or precancerous cells, if given internally, destroying them without damaging the normal structure.

The future in the management of ionizing radiation lies far beyond its usefulness in the treatment of cancer. Amongst the clouds of the future we can already see on the horizon some of the other applications of ionizing radiation either as a research tool or as a possible means of changing physiologic acts which until this moment seemed only possible by Divine deeds. By selective irradiation of chromosomes the immutable laws of inheritance might be changed; hormones and other glandular functions might be modified and the transplantations of homologous and heterologous organs are already in the threshold of our possibilities. These, together with many other deeds, will be made possible by the action of the invisible ionizing rays.

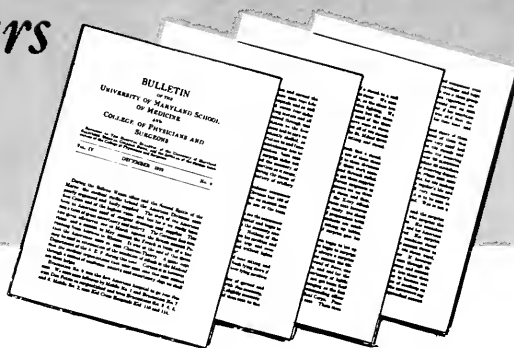
FERNANDO G. BLOEDORN, M.D.
Professor of Radiology

Surgery and Surgical Specialties

SPACE OR PHYSICAL FACILITIES, a problem for many years, gradually becoming more and more acute, must be solved if surgery and its specialties are to keep abreast. The present University Hospital, opened in November 1934, has for many years been vastly overcrowded with inadequate beds for teaching of the present student body, not to mention the larger classes now matriculating. Inadequate additions to this old building will prove a poor stopgap to the long range problem. It is envisioned that within the next five decades the problem will be solved by the erection of a completely autonomous private hospital of 750 beds and the conversion of the present structure for teaching beds only. Such conversion would produce twenty to forty teaching beds each to Urology, Orthopedics, Neurosurgery, Thoracic Surgery, Otolaryngology as well as increase the number of General Surgical beds. This change should be suitable for many years to come and contain graduate and post-graduate teaching on the campus of the University of Maryland School of Medicine.

HARRY C. HULL, M.D.

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL of MEDICINE

UNIVERSITY OF MARYLAND

VOL. XIV

JANUARY, 1930

No. 1

A GENEROUS GIFT

The School of Medicine has been named residuary legatee in the last will and testament of Dr. John F. B. Weaver, of Manchester, Maryland. Dr. Weaver was one of the School's oldest alumni. His singular generosity will ultimately make the School the recipient of the bulk of an estate for which the Orphan's Court has required the executors to give a bond of \$150,000. Dr. Weaver requested that the legacy be used for the establishment of a "professorship, fellowship or research fund" according as the Trustees of the Endowment Fund shall deem advisable. The Trustees gratefully signify their willingness to accept the legacy and to carry out the requests made by the testator. The research foundation made possible by Dr. Weaver's generosity will be named after him.

Dr. Weaver was born in Bachman's Valley, near Manchester, Maryland, in 1841. His early education was received in a nearby academy and in the Hanover Seminary. From here he came to the School of Medicine, University of Maryland. He received his degree of Doctor of Medicine in 1864.

Shortly after graduation he returned to Manchester, where he married Elizabeth Walters, who died in 1916. His life was that of a general practitioner who took a keen interest in the community about him and was active in many ways to promote its progress. Until 1916, he was State Health Officer for the Sixth District,

VOL. XIV JANUARY, 1930 No. 3

BULLETIN
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UNIVERSITY OF MARYLAND



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LOMBARD AND GREENE STREETS
BALTIMORE, MD.

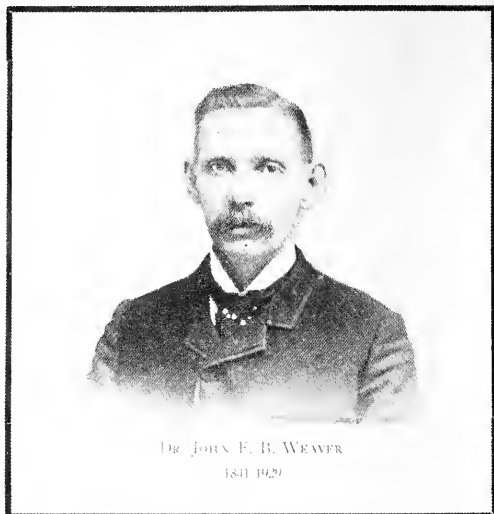
Entered as second-class matter, June 16, 1915, at the Postoffice at Baltimore, Maryland, under the Act of August 24, 1912.

Here is a short note on the origin of the Weaver Fellowships which have helped so many young physicians.

which embraced his town. His death occurred October 27, 1929, as the result of carcinoma.

Although the foundation of Dr. Weaver's fortune rested upon his medical practice, he combined with his professional skill an unusual amount of business ability. Those who knew him have declared that, unlike most physicians who play with investments, he showed rare intuition in placing his money correctly, and almost never made a mistake.

The Trustees of the Endowment Fund appreciate deeply Dr. Weaver's wisdom and foresight which led him to make provision at the School of Medicine for a phase of education that is greatly in need of assistance.



DR. JOHN F. B. WEAVER
1841-1929

SKILLING, DOYLE MEMORIAL

On the East Wall of the entrance foyer of Davidge Hall is a tablet memorializing two young physicians who died during World War I. Here they are—and an explanation of the tablet.

The Class of 1917 is making preparations to unveil on Armistice Day of this year, a bronze memorial to First Lieutenant John Galen Skilling, M.C., and Dr. Joseph Francis Doyle, two class-mates, who made the supreme sacrifice during the World War.

ling, M.C., and Dr. Joseph Francis Doyle, two class-mates, who made the supreme sacrifice during the World War.



LIEUTENANT SKILLING

serving as a resident physician at the Maryland General Hospital, he received his commission and left for active service in September of 1917. After brief stay at Fort Oglethorpe, Ga., he went overseas where he served as Battalion Surgeon, First Battalion, Twenty-sixth Infantry, First Division, A.E.F. He was killed in action on November 6, 1918, at Mouzon, France, while directing the removal of wounded from exposed terrain.

Lieutenant Skilling was a native of Maryland, born in Lonaconing on February 22, 1894, the son of Dr. W. Q. Skilling. He entered the University of Maryland School of Medicine in the fall of 1913 and was graduated with a good record in 1917. While

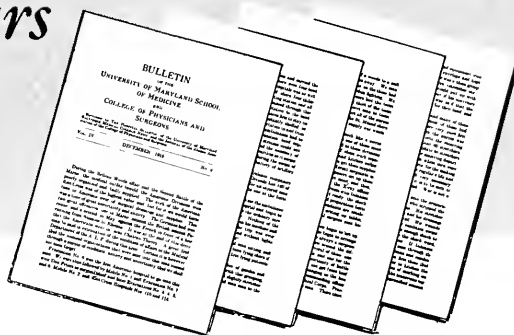


DOCTOR DOYLE

and he was loved by all members of the class. After graduation he returned to Hartford, Conn., where he died in St. Francis Hospital as the result of complications following an operation to enable him to qualify physically for the acceptance of a commission in the Medical Corps of the United States Army.

Dr. Doyle was a native of New Hampshire. He was born in Manchester in 1891. On entering the University of Maryland School of Medicine in 1913 he was elected Class President of the 1917 Class. His progress through the school was rapid

Pages from the Bulletin of yesteryears



EDITORIAL

A NEW VENTURE FOR THE ALUMNI ASSOCIATION AND ITS SIGNIFICANCE

THE MEDICAL ALUMNI HOUSE

No longer is it the sole function of an alumni association to offer its members a means of maintaining a sentimental bond with the Alma Mater and of perpetuating the pleasant associations of student days. The newer concept of function is well exemplified in the development of our own Alumni Association. Springing from three different sources, its membership has been gradually welded into an organization of great solidarity and ever-increasing influence, with no lessening of the finer sentimental ideals responsible for its inception. For this broadening scope the credit belongs chiefly to the succession of energetic and far-sighted officers with which the Association has been blessed in its more recent history. To their motivating power we owe the powerful and stimulating influence which the Association now exerts in the every-day life of the University and its student body.

No better illustration of this need be adduced than in the project recently undertaken by the Association of purchasing a valuable property, in the immediate neighborhood of the School, for the purpose of providing a centre of alumni and student activities. The property is located at 519 West Lombard Street, directly opposite the medical school. To acquire this large building it was necessary to float a bond issue of \$30,000, and the willingness with which the first portion of these bonds offered was purchased by our alumni, speaks volumes for their loyalty, as well as for their business acumen, for the investment is sure to be a good one.

Plans for the remodeling of the building include provision for dining-room and cafeteria service for students, faculty and public, as well as dormitory accommodations for a considerable number of the students. Other student activities, like the Y. M. C. A. and the Book Store which the Association has been so successfully conducting for the benefit of the students, will likewise be housed in the building. On the other hand, the Alumni Association will realize a long-felt want in having comfortable offices in the building, which it is hoped that visiting alumni will visit and utilize when in Baltimore.

SPRING ACTIVITIES SEE PAGE 235

Vol. XIII

APRIL, 1929

No. 4

BULLETIN OF THE SCHOOL of MEDICINE

UNIVERSITY OF MARYLAND



PUBLISHED FOUR TIMES A YEAR
JANUARY, APRIL, JULY and OCTOBER
LOMBARD AND GREENE STREETS
BALTIMORE - MARYLAND

Entered as second-class matter June 15, 1918, at the Postoffice at Baltimore, Maryland, under the Act of August 24, 1912.

The Medical Alumni Association decided to purchase an "Alumni House." This became a misadventure, but ultimately housed the University Bookstore, the building being ultimately razed when the new Health Sciences Library was constructed.



519 WEST LOMBARD STREET

From this centre it is certain that the Association can radiate a larger sphere of activity in the life of the medical school. Each year new lines of work suggest themselves. To mention only a few examples, within the past few years the Association has cooperated both financially and editorially, in the improvement of the BULLETIN; it has inaugurated a Students' Loan Fund, for the financial assistance of students who need and deserve such help; it has spent thousands of dollars in compiling and keeping up to date an accurate directory of graduates; and so on.

The new Alumni Centre means a realization of the dreams of those who have in recent years guided the destinies of the Association. Their

enthusiasm and driving power, communicated to an ever-increasing body of their fellow members, has produced this material expression of what the Alumni Association should stand for. But, after all, the material advantages flowing from a project of this sort are of far less significance than the ideal and the spirit which they typify. Of its honorable past the University can not be robbed. The Alumni Association can help greatly in assuring its future.

PARTIAL LIST OF SUBSCRIBERS TO BOND ISSUE

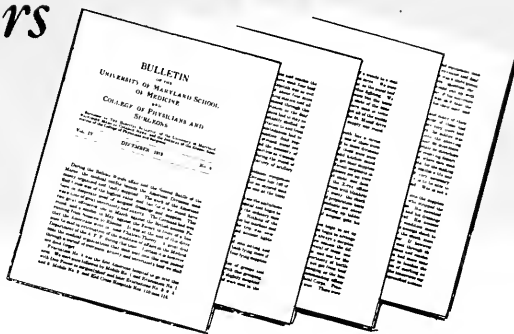
The following is a partial list of subscribers to the Alumni Bond Issue as outlined in the April BULLETIN. In each BULLETIN the names of additional subscribers will be published.

- DR. J. S. WATERWORTH, Clearfield, Pa.
- DR. HARRY M. ROBINSON, Baltimore, Md.
- DR. WILLIAM H. BLANCHETTE, Fall River, Mass.
- DR. E. E. LAMPKIN, Vienna, Maryland.
- DR. CHARLES R. FOUTZ, Westminster, Md.
- DR. EMIL NOVAK, Baltimore, Maryland.
- DR. J. M. H. ROWLAND, Baltimore, Md.
- DR. A. C. LEWIS, Fall River, Mass.
- DR. A. F. RIES, Baltimore, Md.
- DR. JAMES MADISON HORTON, N. Y. City.

The subscriptions are coming in very satisfactorily, and we hope to be able to bring the drive to a close in the near future. Your subscription, as a helper in this movement, which we consider a good one, will be appreciated. Any amount from five dollars up will be acceptable.

MEDICAL ALUMNI HOUSE
UNIVERSITY OF MARYLAND
519 W. LOMBARD ST.
BALTIMORE

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE

UNIVERSITY OF MARYLAND

Vol. XVII

OCTOBER, 1932

No. 2

EARLY HISTORY OF THE ROENTGENOLOGICAL DEPARTMENT OF THE UNIVERSITY OF MARYLAND

By HENRY J. WALTON, M.D.
BALTIMORE, MD.

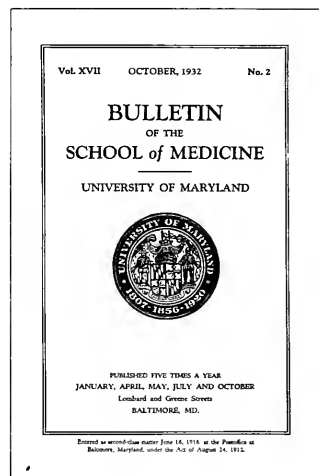
The first X-ray Apparatus at the University Hospital was installed in the summer of 1896, on the second floor of the old hospital annex at 116 S. Greene Street. This was before the present hospital was completed. The apparatus consisted of a Rumkoff coil, storage batteries, small tube and hand fluoroscope.

It was looked upon at first rather as a curiosity. The superintendent of the hospital supervised its use, and for several years no member of the staff was placed in charge of the apparatus. Apparently it was used frequently, and very soon it became an indispensable aid in diagnosis, for in the Bulletin of the University of Maryland, Dec., 1896, Vol. I, Page 133, there is the following Editorial:

"The X-ray apparatus which has been for sometime in use at the University Hospital has a constantly growing field of usefulness. Its aid is frequently invoked in various departments, both medicine and surgery, and its habitual use develops a new and distinct skill which is of increasing value and importance."

The earliest hospital record of the apparatus being used to locate a foreign body is in the Bulletin of May and June, 1897, Vol. 2, Page 70, viz.,

"Dr. I. R. Trimble brought a patient to the University Hospital who was suffering much pain in the end of the right forefinger which



During this period, several new Departments were created; others reorganized—Radiology (described by the late Henry J. Walton) and the improvements in the Department of Otolaryngology instituted in 1930. The New Bacteriological laboratories of 1930 are illustrated. This laboratory on the 2nd floor of 31 S. Greene became the teaching center for bacteriology (later Microbiology) and Pathology until these teaching facilities were moved to Howard Hall.

was lacerated. She gave a history of having run a cambric needle into this finger two years ago. The finger was examined by means of the X-ray apparatus and a foreign body was located a little in front of and somewhat below the distal joint of the finger. The hand was thoroughly cleansed and under local anesthetic, the finger was opened and a piece of needle about one-quarter of an inch in length, much oxidized, was removed."

The X-ray work was not regularly organized as a separate department until 1900, when Dr. Compton Riely was appointed Chief of the Department. A new Snook jumbo coil and mechanical interrupter were purchased, and a dark room provided and the Department was moved into two small rooms on the third floor of the present hospital building, across the hall from the Surgical Amphitheatre. About this time, the bad effects of long exposure to direct radiation were being generally observed, and as there was no protection provided for the operator, it was not long before Dr. Riely noticed that his hands were showing the effects of over-exposure and he resigned and devoted his entire time to his orthopedic practice.

Dr. Willis Bryan Fitch was then placed in charge, but remained only one year and resigned on account of poor health.

After the resignation of Dr. Fitch in 1904, Dr. Nathan Winslow was appointed Roentgenologist. Through his efforts, a larger and more powerful coil and electrolytic interrupter were added to the equipment. At this time, the X-ray was used principally for the detection of fractures, the localization of foreign bodies, determining the presence of kidney stones and for diseases of the gastro-intestinal tract. Dr. Winslow says that with this new apparatus, it was possible to make X-ray examinations of the hand in 1 minute, chest in 3 minutes, kidneys in from 8 to 10 minutes and pelvis in about 15 minutes. There was still no protection provided for the Roentgenologist, and in 1907 Dr. Winslow's skin began to show the effects of repeated exposure and he resigned and discontinued all work with the X-ray.

Dr. Winslow was succeeded by Dr. Howard E. Ashbury, who was the first member of the staff to devote his entire time to Roentgenology and specialize in this branch of medicine. Dr. Ashbury resigned in 1911 to devote his time to private practice.

In 1911 Dr. Henry Chandlee was appointed Roentgenologist, and Dr. Henry J. Walton

Assistant Roentgenologist. The X-ray work at this time had become so important that it was thought best to have the Department open all day. Dr. Chandlee was one of the pioneers in Roentgenology in Baltimore. Very soon after Roentgen's discovery in 1895, Dr. Chandlee, being of a mechanical turn of mind and an electrical engineer, became interested in the X-rays and began experimenting with a small coil, some wet cells and Crooks tubes. By 1898 he had built for himself a very serviceable X-ray machine which took excellent radiograms. He was the first physician in Baltimore to practice Roentgenology and to do X-ray work in his office. His apparatus was small and could be easily transported, and on a number of occasions he made X-ray examinations in the homes of patients. He also gave a number of lectures and demonstrations to audiences, both in the city and counties, and it was frequently my privilege to assist him on these occasions. Another hobby of Dr. Chandlee's was photography. He was untiring in his efforts to improve his technic, both in the making of his X-ray examinations and in the development of his films, which resulted in radiograms and prints showing exceptional detail. In 1901 Dr. Chandlee enlisted in the Boer War and started for South Africa, his trip being sponsored by Boer sympathizers. He was to go by the way of Holland and take with him his X-ray apparatus. Upon reaching Holland he learned that the Boer War had ended and his plans for working in Africa were abandoned. While in Europe he took advantage of his opportunities by extending his surgical and X-ray studies in Berlin and London. He returned to this country with some new apparatus added to to his own and a 10 mg. plaque of Radium which he expected to use in the treatment of superficial skin lesions. The results he obtained with this very small quantity of Radium in epitheliomas about the face seemed little less than miraculous at that time.

It is needless to say that the Roentgenological Department of the University Hospital took on new life under Dr. Chandlee's leadership. Within a year the number of X-ray examinations increased over 300%, and more commodious quarters were provided in the rooms now occupied by the Pathological Laboratory. A new Snook transformer of the most modern type and a fluoroscope were purchased, both of which pieces of apparatus are still in use at the hospital. New Coolidge tubes replaced the old gas and hydrogen tubes, and the Roentgenolo-

gical Department became second to none in the city. Dr. Chandlee was a man of unusual ability, he was modest and unassuming and always glad to teach others what he knew. His ceaseless activities and tremendous energy weakened his never too robust constitution, and in the spring of 1916, he developed a carbuncle of the neck, which caused his death on April 19, 1916.

Dr. Henry J. Walton, who had been Dr. Chandlee's assistant since 1911, and who had spent two years with Dr. Baetjer in the X-ray Department at the Johns Hopkins Hospital, was then appointed Roentgenologist.

It was not long before the Department again outgrew its quarters; the work having increased to such extent that in the fall of 1916 it was

necessary to move to the ground floor of the hospital, where double the amount of space was provided. Following this expansion there was a rapid growth in the department and within five years, the work had increased about 150%. The increase in the number of patients and the demand for special apparatus made it necessary to again seek more room, and in 1922, the Roentgenological Department was moved to the first floor of the two adjoining buildings on Lombard Street west of the Hospital.

The next move of the Department will be to the second floor of the new Hospital soon to be erected, where modern facilities will be provided for still further developments in the undiscovered possibilities of the X-ray.



BACTERIOLOGICAL LABORATORY

Vol. XV MAY, 1931 No. 5

THE NEW QUARTERS OF THE DEPARTMENT OF BACTERIOLOGY

Since the amalgamation of the College of Physicians and Surgeons with the School of Medicine of the University of Maryland, the Department of Bacteriology has occupied temporary quarters which, for a number of years, were widely separated from the rest of the school. Before the beginning of the present academic year, however, it was moved into the building on Greene near Lombard Street.

This, formerly known as the Dental Building, was completely remodeled and newly equipped during the past summer. The department uses about twenty-five per cent of this building.

In the basement is a storeroom of adequate size for supplies and on the first floor is the office of the head of the department. Also on this latter floor is the library which is used conjointly with the Department of Pathology.

On the next floor, running the entire length of the building and fronting on Greene Street, is a large and modernly equipped students' laboratory. This was so planned that not only Bacteriology and Immunology can be taught in

it but also General Pathology and Clinical Pathology. The inserted illustration presents a clear picture of this room and its equipment.

On the second floor, to the east of the students' laboratory, is the preparation and sterilization room. This is used by the students in the preparation and sterilization of culture media. This room, like the laboratory, is large enough to accommodate comfortably 100 students. All the apparatus installed in this room

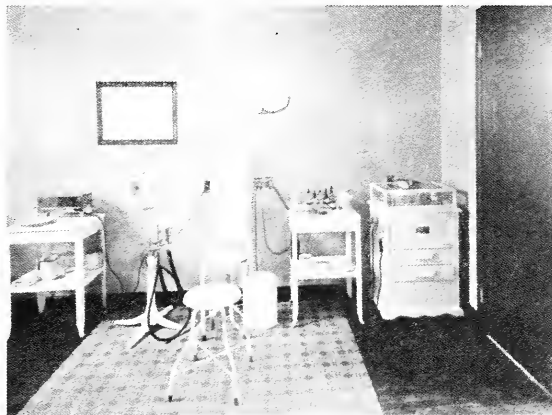
is new and of modern type.

Opening on the corridor connecting the students' laboratory with their preparation room are two other rooms, one an incubator used by the students for their bacterial cultures, the other a refrigerator for storage of culture media and sera.

To the north of the students' preparation room are two laboratories for the use of members of the teaching staff of this department.



LOOPER EAR, NOSE AND
THROAT CLINIC, UNIVERSITY
HOSPITAL.



TREATMENT ROOM

Vol. XIV APRIL, 1930 No. 4

EAR, NOSE AND THROAT CLINIC OPENED AT UNIVERSITY HOSPITAL

One of the most important additions to the University Hospital in recent years has been the establishment of a clinic by Dr. Edward A. Looper, called the Looper Memorial Bronchoscopic Clinic for treatment of the diseases of the ear, nose and throat.

The old sun parlor on the fourth floor has been transformed into a beautiful clinic, consisting of one of the best equipped operating rooms for bronchoscopy in the South; a modern operating room, with the latest instruments, including endothermy equipment for nose and throat work; sterilization, treatment and consultation rooms which makes it a very complete unit.

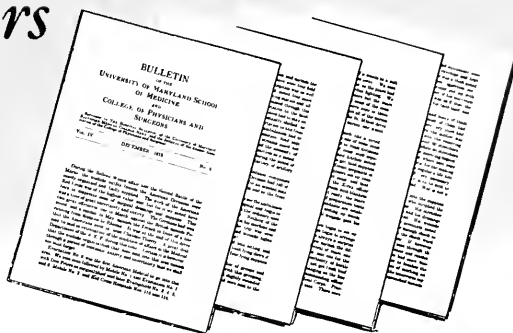
Such a clinic has been badly needed at the University Hospital for a long time and speaks well for the efforts that are constantly being made toward progress at this Institution.

Bronchoscopy and esophagoscopy is now receiving considerable attention and the University is fortunate in being able to offer the latest facilities in this particular field.

The clinic is due to the generosity of Dr. Edward A. Looper, who established it as a memorial to his little daughter who lost her life a year ago when a piece of celery lodged in her bronchus.

The old sun parlor was given by the University Hospital authorities. The reconstruction was aided by the Woman's Auxiliary Board. Dr. A. J. Lomas, the Superintendent, who has largely been responsible for the many improvements at the University Hospital during the past few years, supervised the construction. The Clinic is now one of the show places of the Hospital. The rooms are all well lighted and the walls have been painted in attractive colors so that the whole unit presents a pleasing appearance.

Pages from the Bulletin of yesteryears

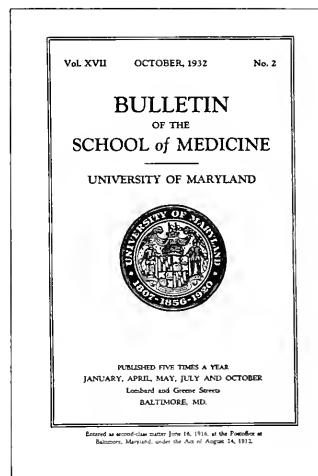


GORDON WILSON (1876-1932)

On Wednesday, October 26, 1932, in the late afternoon, Dr. Gordon Wilson died suddenly and unexpectedly. He had been in his office for the usual hours, complained of feeling tired, and had gone to a back room to rest. There arose the necessity to disturb him, but when approached he was unconscious. There thus passed, peacefully and quietly, the spirit of a gentleman. He had wished for a sudden death. His "luck held good" and his wish was granted, but all too soon, for he was only fifty-five years old.

There is an old legend that a sun dial, hidden away at the site of an ancient mansion in the midst of a forest, bore the following inscription—"It is later than you think". Chance wanderers coming upon this forgotten dial and its inscription, all that remained of a departed activity and grandeur, would stop and read its message, stay a while to brood over its meaning, and pass on. Dr. Wilson's death came as a surprise and shock to those who knew him, and a shadow crossed their path. For many of us it is later than we think.

He was born on November 30, 1876, a son of the late John A. and Ellen Gordon Wilson, and was related to many prominent Virginia and Maryland families. As a child he spent some time at school in Lausanne, and later graduated from the Episcopal High School of Virginia. He then passed two years in the Academic Department of the University of Virginia, and received his medical degree from the same institution in 1899. He returned to Baltimore and spent the summer as a resident at Mt. Wilson, a hospital devoted to the treatment of infants. After this he worked in the Medical Dispensary of the Johns Hopkins Hospital for a short time, but later in the same year, 1900, was appointed Resident Physician. He had charge of Dr. Osler's private patients, and thus early came under his influence; this gave direction to his future life. The next year was occupied as a



During this era several prominent professors died. The biographies of Doctors Gordon Wilson and Joseph Holland are among the more interesting.



resident fellow in pathology under Dr. Welch, and this was followed by some post-graduate work in pathology and medicine.

In 1902 Dr. Wilson came to the University of Maryland as chief of clinic in the medical dispensary and brought with him an alien training and the urge of the new life in medical teaching. The Medical School of the University of Maryland had just completed a greater quarter century because of an unusual coterie of outstanding men. But the men of this group had grown old together, and were now dead or in retirement.

Dr. Wilson's influence was almost immediately felt. He brought with him youth, enthusiasm, charm and sincerity of manner, fearlessness, and a keen, but kindly impersonal judgment. Added to all of this, he was an excellent teacher. In a short time, students and teachers turned to him for inspiration, leadership and advice.

Each succeeding year, with his enlarging clinical experience and his developing ability as a teacher, saw continued advancement, until 1913, when he was made professor of medicine and head of the medical department. These onerous responsibilities, including, as they did, didactic lectures, clinics and administrative direction of medical teaching in the school and hospital, were continued until 1922.

His force and attractiveness as a teacher are well remembered by his many students. Thorough in examination, quick in diagnostic perception, clear in exposition, with a deep toned and pleasant voice, he was, in many respects, the embodiment of the ideal teacher. He had a retentive memory, and was able to use the results of his wide experience both in reading and practice.

In 1906 he spent four months in Strassburg, working both in pathology and medicine, under the late Professors Chiari and Krehl. Upon returning, he had an added enthusiasm for the study of tuberculosis. This was perhaps largely due to two factors: first, his personal experience with the disease; and secondly, the intense interest in that subject in the early 1900's, especially through an exhibition in Baltimore and the meeting of the International Congress in Washington in 1908. In 1907 he was appointed visiting chief of the Baltimore Municipal Hospital for Tuberculosis. He also was a member of the Board of Managers of the Maryland State Tuberculosis Sanatorium when it first opened (1910) and this relationship had continued to the present. The mention of these activities serves to indicate his rather important position in relation to this subject in the City and State.

It was in this period between 1907 and the entrance of the United States in the World War that his activity and influence as a teacher reached its prime. He was busy both in the University Medical School and at the City Hospitals, and during this time he gathered around him a group of young men, every one of whom have continued to think of him often and with affection.

These men are now widely scattered: R. G. Hussey at Yale; H. M. Stein and Charles C. Habliston in Baltimore; A. G. Hahn at Saranac; E. L. Cook in the Army; F. F. Callahan at the head of Pokegama Sanatorium, Minnesota; Wm. H. Yaeger in Hagerstown, and L. M. Limbaugh in Jacksonville, but all carrying on because their "lips had been touched by a live coal from off the altar."

He was a member of many medical associations and clubs. His chief interest was in the American Climatological and Clinical Association, of which he was president in 1924, and since then had continued a very active interest in its affairs, and served it on many committees.

This long interest in the subject of tuberculosis gave color to his entire medical life. Indeed, at one time, he very seriously considered devot-

ing himself entirely to this work. It afforded opportunity for an ever widening group of professional friendships. It provided outlet for an innate sympathy and understanding in his contacts with patients so afflicted. It enabled him, too, with his combination of rare tact and practical advice, to instill courage and hope in many young medical men, victims of tuberculosis in the early part of their professional lives. Not a few such men, now in responsible positions in the tuberculosis world, affirm their love and gratitude for his inspiring guidance and his help in "placing" them where they have been able to work out their own salvations.

Another important activity, carried out hand in hand with these, was his position as medical director of the Maryland Life Insurance Company of Baltimore. This work had engaged him since 1912. It was only "part time," but it required a study of the problems associated with medical selection in life insurance. He was a welcomed and active participant in the annual meeting of the Medical Directors Association, from time to time, reading papers particularly relating to the clinical side of this field. Here, too, he enjoyed a wide group of professional friendships, apart from those acquired in the circles of teaching, tuberculosis and the Climatological Society.

Another phase of his life was his experience during the War period. In the early part, in 1917, he was assigned to special tuberculosis boards, first, the Maryland Infantry, and later at Gettysburg in a wider field. In the autumn of the same year he was sent to the Base Hospital at Camp Meade, Maryland. He had the rank of Captain. This winter was one of extreme severity, quarters were crude and incomplete; living conditions made physical comfort impossible. Partially as a result of this, but chiefly as a result of a lack of robustness, which should have prevented his induction into service, his health declined to such degree that certain of his friends become so apprehensive that they secured orders for a physical survey, and he was discharged from the Army. This was all done without his knowledge or consent. When discharged, he had the rank of Major. At the time he left the service his physique and resistance seemed broken and his friends were alarmed. Nothing in his life gave better proof of his courage and saneness than the manner in which he came back after this experience, and he was not helped toward recovery by either hopefulness or buoyancy of spirit, as he was

not overburdened with either of these qualities.

After this he gradually returned to work and to a reasonable degree of health. Much of his active hospital work was discontinued, especially in tuberculosis. His interest was maintained by his continuance upon the board of the State Sanatorium. He had an active office and consulting practice which rapidly extended, especially since so much of his time was no longer occupied in teaching. Recently, he spent one day every other week as a medical consultant to the Veterans Bureau Hospital at Mount Alto, Washington. This work he greatly enjoyed.

Dr. Wilson was in the habit of giving a yearly lecture on medical ethics and there are many hundreds of men now in active practice, who associate his manner of living with the old and fine traditions of good behavior in the relationship of physician to physician and of physician to patient. He usually ended these informal talks, quoting in a voice that became more deep and resonant with each succeeding word, "Whatsoever ye would that men should do unto you, do ye even so to them."

In 1908 he married Miss Elizabeth Preston Elliott, daughter of the late Mr. and Mrs. Warren G. Elliott of Baltimore. Mrs. Wilson survives, together with two children, Mrs. John Oliver Needles and Miss Elizabeth Elliott Wilson. During most of his married life he lived at 12 Whitfield Road, Guilford, in a house largely designed by himself, and which always remained one of his minor enthusiasms.

He was a man of many qualities, but perhaps his chief characteristic was his abundant success in friendships. This was, indeed, a rare gift, arising from a deep sympathy and quick appreciation, coupled with a gracious and courteous manner. Yet, it was of no facile type, as he was fearless in judgment, and quick in resenting any deviation from right conduct. He was singularly clean in thought and expression, with a keen wit and an appreciative humor. His hearty laugh and resonant voice will be sadly missed.

Life for him was relatively short, but, as it was lived, full. From all its facets, husband, father, counsellor, teacher, colleague, dinner companion, crowd memories of his endearing charm.

But it was Gordon Wilson, the friend, that we sorely miss. He was an idealist, thinking unconsciously more of honor than ambition, and placing the joys and obligations of friend-

ship high above gain. Many of us came with him through youth and into middle age together, and, while we live, we shall not forget his joy in his friends, his love of human contacts, his steadfast unselfishness, his wonderful voice, rich and vibrant like a bell, his hearty laugh; these traits, along with many others, went into making a man and physician, whose passing has left the world poorer and his friends disconsolate.

He often quoted snatches or tags of poetry, perhaps most frequently from his longtime favorite, Kipling. And from Kipling we may get this most appropriate estimate of his character—

"And as he trod that day to God, so walked he from his birth,
In simpleness, in gentleness, in honor, and clean mirth."

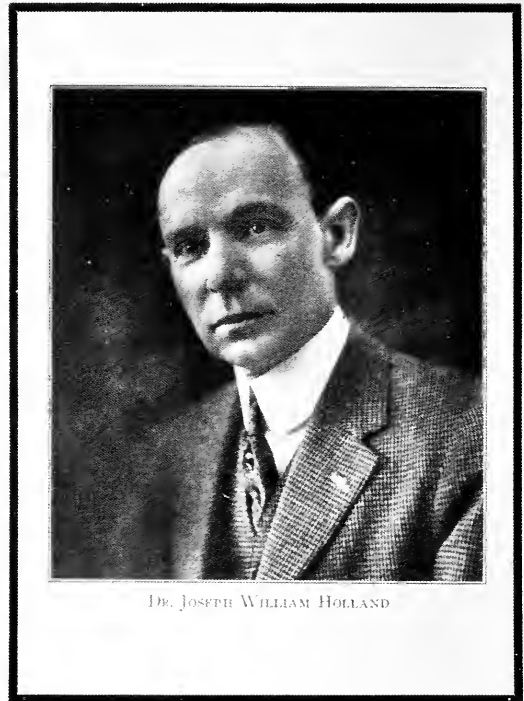
G. CARROLL LOCKARD
ARTHUR M. SHIPLEY

DR. JOSEPH WILLIAM HOLLAND

December 22, 1869
September 1, 1929

Dr. Holland died at ten minutes past two o'clock in the afternoon on board the *S. S. Doric*, about two hours from Montreal. It was a beautiful Sunday afternoon and we had had three quiet days on the St. Lawrence River. His death came very suddenly at the end of a vacation abroad, where he had showed a continuous interest and pleasure in the manifold circumstances of European travel. The trip had been free from annoyances and both crossings had been pleasant ones. He seemed happy and contented and just before he died he said that he had been feeling especially well and had never had a more enjoyable time.

His death is a serious loss to the University of Maryland and especially to the University Hospital. Teaching hospitals are earnestly seeking those who possess the following qualities—men and women who are well trained in their respective specialties, who have the ability and the will to teach and who, because of their character, exert a strong influence on all the human elements that make up a hospital. Because he had these qualities in such full measure, makes Dr. Holland's passing such a grievous loss. He was an able surgeon, painstaking, conscientious and skillful and was a teacher of rare fidelity, patience and success. He had had a long train-



DR. JOSEPH WILLIAM HOLLAND

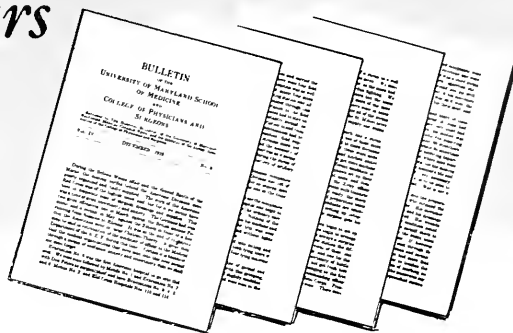
ing in the anatomical laboratory, so that he taught surgery largely from the standpoint of anatomy and was a fine representative of a type of surgeon that is now passing; but it is not in either of the above fields that his loss is so irreparable. It is "Joe" Holland, the man, whose place cannot be filled in the University Hospital group. It was the courage and faithfulness, the justness and quiet strength that were in him that make every one of us yearn to meet him again along the halls and corridors of the hospital.

He was widely popular. Students and patients knew him as Dr. Holland, internes, residents and nurses spoke of him lovingly as "Uncle Joe" and his friends and associates called him "Joe." He was impartial, just and honest in his contacts with everyone, so that his colleagues came to lean on him in matters of judgment and advice. He had the rare quality of talking frankly and plainly, uninfluenced by any personal feeling. He is dead and the world will never be quite the same, because we shall miss his friendship, his gentleness and his companionship. We remember and repeat the words spoken by David over Abner—

"Know ye not that there is a prince and a great man fallen this day in Israel."

Con't on p. xlii

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE

UNIVERSITY OF MARYLAND

Vol. 19

JANUARY, 1935

No. 3

PRIMARY CARCINOMA OF THE LUNG

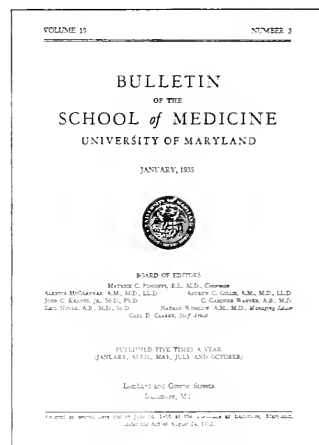
REPORT OF 11 CASES WITH A STUDY OF THE PATHOLOGY¹

By C. GARDNER WARNER, M.D.

The first description of primary carcinoma of the lung is attributed to Bayle (1) in 1810. Stokes (1) in 1842 recognized several varieties of this disease. Ebermann (1) as early as 1857 collected 72 cases, one occurring before the age of 9 years. Jaccoud (1) appears first to have clinically distinguished the disease from phthisis. Rokitsky (1) recognized several gross varieties of the pulmonary lesions, but the earliest microscopical studies were those of Langhans, Marchiafava and Malassez (1) in 1871-1876. The accurate and detailed data of Wolf (1) in 1895 and Passler (1) in 1896 have been the chief source of our early knowledge on this subject. In 1911, Adler (2) was able to tabulate 374 cases and this monograph has served as a basis for subsequent study. It is in the last two decades that this condition has become more generally recognized. The extensive review of this disease by Fried (3) in 1931 is the source of much of the information in this article. He states that the cases reported in Germany alone number many thousands. It is apparent in the literature that the disease is recognized more generally abroad than in this country.

The increasing incidence of primary carcinoma of the lung is apparent to every student and practitioner of medicine. The current literature is constantly adding to the rapidly accumulating number of reported cases. At almost every symposium or clinic in which diseases of the chest are discussed, this condition receives considerable attention since it is an interesting entity both from clinical and pathological standpoints. The increasing frequency of occurrence of primary

¹ From the Department of Pathology, School of Medicine, University of Maryland.



Among the scientific papers of the early years was a most important contribution on the subject of lung cancer written by the late C. Gardner Warner, who was among the first in this country to note the alarming increase in bronchogenic carcinoma. Portions of Warner's paper are reproduced below, including his rather careful treatment of possible causes.

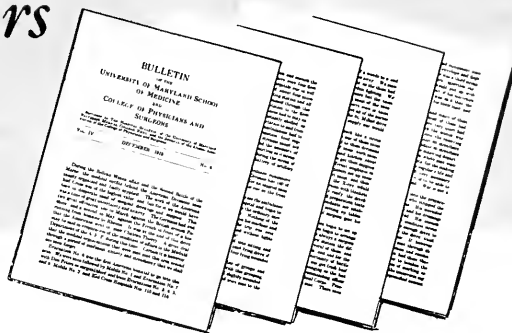
malignancy of the lung was forcibly brought to the attention of this department by five such autopsies within a period of six months. Six other cases were found in the records of this department in a short series of 1100 autopsies. It is thought advisable to bring together these 11 cases for pathological study.

The etiology of carcinoma of the lung is of course unknown, but certain predisposing factors are recognized as often associated with it. Chronic irritation has been incriminated as a probable causative factor of carcinoma for the last decade. The respiratory tract is exceptionally open to physical and bacterial invasion from without. Inhalation of tobacco smoke has been suggested, as the disease is more prevalent in men, and as this sex is more addicted to this habit; however, no convincing statistics have been offered to substantiate the assumption that this physical factor has any etiological bearing on bronchogenic carcinoma. Likewise,

exposure to coal tar products from macadamized roads, or exhaust gases from the increasing motorized traffic has been blamed without adequate proof.

The chronic irritation of the bronchial lining produced by bacteria undoubtedly plays a predisposing part. The apparent increase in this disease appears to have followed in the wake of the influenzal epidemic of 1918-1919. A history of this disease is present in many of the cases of bronchogenic carcinoma. Chronic bronchitis is also claimed to be a predisposing factor. Histological study of these conditions in which a bronchial or peribronchial infection is prominent often shows ulceration and metaplasia of the bronchial epithelium. In one of the cases in this series a squamous cell carcinoma developed in the wall of an abscess cavity. The suggested association with tuberculosis has never been satisfactorily demonstrated.

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE UNIVERSITY OF MARYLAND

Vol. 19

APRIL, 1935

No. 4

PRAYER AT DEDICATION OF UNIVERSITY HOSPITAL

DECEMBER 15, 1934

By REVEREND DR. ARTHUR B. KINSOLVING
BALTIMORE, MD.

O God, Creator and Father of men, Who dost claim our service through the needs of our neighbors, we thank Thee for the faith that Thy gracious arms enfold our burdened lives. Thou hast put it into the hearts of men to make ever increasing provision for the relief of pain. We give Thee thanks for the progress witnessed in our day in surgery and medicine and nursing.

Today we dedicate to Thee this hospital set down amidst the growing multitudes of this great city. We thank Thee for the visions and inspirations which began this work, and the patient labors which have now brought it to completion. For the generations of men and women who have here dedicated their lives to the alleviation of those ills which our mortal flesh is heir to, we praise Thee. May this symbol of Thy Fatherhood and mercy give hope to many a patient, and bring confidence to thousands of those who are anxious, discouraged and sad. Grant skill to the physicians who shall serve here, and to the nurses who from year to year stand about these sick beds the gift of thoroughness and patient devotion to their calling. Continue, we pray Thee, to turn ever more and more the hearts of the strong and well to the needs of the sick and suffering. Restring the cords within us which have become less sensitive to the joys and griefs of others, and grant us so to see Thy image in our fellow-men, that in serving them we may minister to Thee, the living Saviour of the world. Through Jesus Christ. Amen.

FOR SPRING ACTIVITIES SEE PAGE 208
VOLUME 19 NUMBER 4

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APRIL, 1935



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*A few historical articles
extracted from the BULLETIN.*

*After more than 3 years of
planning and construction the
"New" University Hospital
was formally dedicated and
opened for the treatment of
the sick in 1934. Here are the
proceedings as reported in the
BULLETIN.*

REMARKS BY PRESIDENT R. A. PEARSON WHEN INTRODUCING GOVERNOR RITCHIE AT THE DEDICATION EXERCISES OF THE NEW UNIVERSITY HOSPITAL

BALTIMORE, MARYLAND, DECEMBER 15, 1934

It would not be possible to mention the names of the many persons who have helped to make the new University Hospital a reality. It is appropriate to mention a very few. The Planning Committee of the Hospital Staff was composed of Superintendent A. J. Lomas, who served as Chairman, Dean J. M. H. Rowland of the School of Medicine, Dr. Arthur M. Shipley, head of the Department of Surgery, and Dr. Maurice C. Pincoffs, head of the Department of Medicine.

This committee worked in close contact with the architects, Messrs. Edmunds and Crisp, and Smith and May. The associates of Dr. Lomas, and the architects pay tribute to him for his exceptional ability, his resourcefulness, his diligence and patience.

The plans were made and the work proceeded under the general direction of a special committee of the Board of Regents. The Chairman of the Board, Mr. George M. Shriver, served as chairman of this committee, and his associates were Samuel M. Shoemaker until the time of his death, John M. Dennis, William P. Cole, Jr., and John E. Raine.

When the appropriation for the building was made, it was with the understanding that it would be supplemented by private gifts. The committee in charge of this important effort was composed of a large number of citizens of Baltimore and of the counties who were not members of the University Staff—representatives of the Women's Auxiliary Board, and a considerable group of staff members, under the chairmanship of Mr. Shriver.

What made the new Hospital possible, of course, was the action of the Legislature and the Governor in appropriating the sum of \$1,500,000. It would be extremely difficult to express the appreciation of members of the Hospital Staff and the faculty of the School of Medicine on account of this important official action. It would be quite impossible to indicate the appreciation of this action of the Governor and the Legislature that will be felt through years to come by ever increasing thousands of Maryland people who will benefit because of the new equipment.

Governor Ritchie was one of the few who seemed to see the whole picture. He saw the old Hospital with 250 beds, which had served well for many years, often overcrowded and with extra cots in the wards and rooms, and he realized the danger of housing many sick people in a non-fireproof building. He saw the difficulties experienced by the members of the Hospital Staff, most of them serving without pay and serving well—so well that the rating of the School of Medicine with the old Hospital was always high. He knew the growing needs of the State in a time when the complexities of living were more trying than ever before. He knew of the great free dispensary service, ministering to hundreds of patients daily, and crowded into a cellar that was not adapted to the purpose.

It is with the greatest pleasure that I announce the first speaker on the program, His Excellency, Governor Albert C. Ritchie.

ADDRESS AT FORMAL DEDICATION EXERCISES OF UNIVERSITY OF MARYLAND HOSPITAL

AT PEABODY INSTITUTE, BALTIMORE, MARYLAND, DECEMBER 15, 1934

BY IRVING S. CUTTER, M.D.¹

It is pleasant to contemplate the fruition of a great enterprise. But things that are worth while never just happen. They cost labor, pain and sacrifice. A stalwart, virile structure—dedicated to public service—has arisen in our midst, and we join in hearty congratulations to each and all who have aided in its creation. This new University Hospital did not spring—full-fledged from the head of Jove; it came because of far sighted planning and with the full coöperation of a sympathetic University President and Board of Regents, a wise Governor and a courageous Legislature.

And yet I venture the assertion that the goal, so happily achieved, would be far in the future, were it not for the splendid traditions of the faculty of medicine with a record of service of more than a century and a quarter.

In order that we may acquire a proper perspective, let us glimpse briefly a stone or two in the foundation of medical education in Maryland—laid in 1807.

Few of us, transported to the scenes of those days, could face the discouragements (that appeared on every hand) with enthusiasm or even

¹ Dean of Northwestern University Medical School

complacency. Money was hard to get, epidemics of yellow fever were fairly frequent and Maryland physicians imbued with educational ideals were not as numerous as they are today. But Maryland had already taken a forward step in organizing her physicians into a faculty, not for purposes of teaching but for the improvement of the profession and the protection of the people. This distinguished group, the Medical-Chirurgical Faculty of Maryland, then as now, encouraged those who were academically minded.

For every emergency, every need affecting human welfare, great men seem to arise, men who are prepared and willing to shoulder burdens and supply leadership, and noble spirits appeared in your midst. Their names loom large on the pages of history—Davidge, Potter, Baker, Gibson, De Butts, Cocke and Pattison, to mention but a few. To Davidge and Potter particularly Maryland owes a debt impossible of liquidation. And no matter how we view the grandiloquent Pattison, he it was who gave a figurative transfusion in 1821 and revived drooping spirits. He was fresh from the laboratory of that great Glasgow anatomist, Allen Burns, and brought with him Burns' magnificent collection of anatomical preparations. We find it difficult, however, to forgive him for collecting from the school the sum of \$8,000.00 for those same specimens, but we must remember that anatomy was the keystone of the educational arch, and the school with the best anatomical museum was perforce the best school.

We may grant that medical training in the State of Maryland in 1807 was a rather poor thing as contrasted with that of the splendidly organized school of medicine of the University of Maryland of 1934—now with its new hospital. And yet, I think we may say in all fairness that individual devotion was fully as great then as it is now. The inauguration of the medical school, its rapid rise in public confidence, the rather broad powers granted to the College of Medicine of Maryland by the legislature led finally to the creation of the University of Maryland. Those early days were days characterized by valiant striving, beginning with the erection of the college building at Lombard and Greene Streets in 1812.

Some few years ago chance threw my way an old manuscript ledger of two folio sheets entitled: "The State of Maryland (for the University of Maryland in Baltimore) in account current with the Professors of the Faculty of

Physick." The items listed begin with 1812 and end about 1826. Most of them deal with the erection of the college building and its equipment, and with the administration of the several lotteries authorized by the legislature for that purpose. There are a few rather striking items. For example, more than \$7,500 was spent for chemical equipment and apparatus. Nearly \$800 was used for a furnace with which to heat the anatomy room, and the initial library expense for books amounted to almost \$800.

There are numerous mentions of the pending descent of the sheriff and the scramble that ensued to forestall his approach. In 1813 it is recorded that a loan of \$1,974 was secured from Dr. Samuel Baker, professor of *Materia Medica* (1809-1833) "from his private funds to rescue the University from public auction by the sheriff of Baltimore County, the suit of Price and Watson." Again in the same year the medical professors passed the hat to the tune of \$700 "to stay the sheriff on B. Berry's suit." A little later the plate went around "to stay execution of S. I. Donaldson on Mercier's note of \$500," and a loan of \$300 was received from R. Gilmor "on faculty credit to save University from sheriff."

Trivial and inconsequential as these items may appear to us now, who can doubt but that they represented weeks and months of anxiety and much scratching of professional heads to find the ways and means.

The chief sources of funds were lotteries. This method of money raising was so popular that it was relied upon for many types of public works and improvements. It eliminated the necessity of direct taxation and hence the legislature was generous in the distribution of the privilege. Apparently, however, lotteries for the benefit of the Faculty of Physic were not quite so popular or for some reason did not sell so well, as the school for many years was in difficult financial straits. The lottery of 1812 netted slightly over \$29,000; that of 1813 was apparently sold to a commercial concern for \$12,500. Later another class of the same lottery was sold in 1816 for \$7,500. In 1821 a first class lottery for the benefit of the University of Maryland netted a little over \$8,000. When in 1813 the professors of the medical faculty determined "to build a high wall around the college lot" the required amount, namely \$7,000, was not in the treasury and the sum was borrowed from the Bank of Baltimore.

In 1821 the prospects of the school were

greatly enhanced when the State of Maryland loaned the Faculty of Physic \$30,000. The State held title to the school property and the faculty obligated itself to pay the interest—\$1,500 per annum. All of this meant the erection and equipment of your beautiful old school building—for it is beautiful—hallowed with undying memories. In the amphitheatre, which let us hope you will never destroy, immortals like Ephraim McDowell and LaFayette received academic honors.

These scattered incidents are cited to emphasize anew that there is an ebb and flow not only in the affairs of men but likewise in the affairs of medicine. Lean periods occur only to give way to a richer and more glamorous era.

Your beautiful new hospital is, in a sense, a direct successor of the first hospital of the University of Maryland built in 1823. It is a free will offering of the State to which has been added certain funds from the Federal Government and the contributions of public-spirited Baltimore citizens. It is a cap sheaf, as it were, crowning, protecting and fostering your whole structure of medical education and the prevention of disease. The State has extended a generous hand and the Faculty of Medicine and the Regents of the University of Maryland have accepted a definite responsibility. It must forever stand between the people of Maryland and pestilence and untimely death.

The hospital of a State University has four primary functions: (1) the kindly, sympathetic and skilful care of those who are ill; (2) the teaching of medicine at the bedside to the end that well-trained physicians may be prepared to minister to the people; (3) the dissemination of information about health and the prevention of disease, information that the public should acquire and has a right to know; and (4) the advancement of the boundaries of human knowledge.

Upon the sick patient must be focused the finest qualities of heart and mind. If for one moment the staff of your great hospital shall deviate from that objective, that moment will witness the subversion of a noble gift, the prostitution of a sacred enterprise. The quality and high standing of the Medical Faculty of Maryland is sufficient warrant that this untoward eventuality shall never occur. Students learn more by precept and example than by didactic instruction and they will follow with unerring fidelity the ethics of practice of their teachers.

The University Hospital must be regarded as

the sunlight that ripens and matures medical training. We can well understand the course of study followed by medical students in the later years of the eighteenth century and the early years of the nineteenth. They listened to the lectures of the Edinburgh professors, took notes, and then received their degrees. Medical education in Edinburgh had been systematized with a fixed curriculum and scores of young Americans found there a relatively easy pathway to a degree. But when it was all over they knew pitifully little about medicine or surgery or midwifery. And so, all of them, or the best of them, journeyed to London where they walked the wards of the London hospitals. There, they received clinical training from master clinicians at the bedside. They learned for the first time the how of an amputation, of the ligation of a blood vessel, but more important than all, they learned *clinical observation*. Medicine cannot be taught from books or by means of lectures or museum specimens. The type of medicine that trains for the care of the sick must be learned through intimate contact with those who are ill. With reasonable supervision, the student must have the opportunity to examine the patient, correlate the laboratory sciences and thus acquire that essential trait, the ability to think clearly, logically and intelligently on a clinical problem.

But you say, what of research? what of investigation? If you would avoid sterility, investigation, teaching and the care of the sick must go hand in hand. Not only will students be stimulated in an atmosphere of investigation, but the people of the state will be the ultimate beneficiaries. Medicine is not a cast iron science. There are no two cases of pneumonia exactly alike, as there are no two people who match each other in structure or resistance. Even identical twins present differences. We cannot be blind to the medical progress of the last generation, and we must view that progress as an indication of the existence of an untrodden disease wilderness waiting to be explored.

Your new hospital is unexcelled in point of construction, equipment, staff and personnel, but it will become a mere mass of building material if every ward, every laboratory and every room does not reflect, in faculty and in students alike, a spirit of enthusiasm and interest in the search for new truths. The younger men of the staff and of the teaching group, filled with energy and ambition, will plow the fields of ignorance and will acquire new knowledge. They will be

guided away from mistakes and pitfalls by the sound logic, the judgment and the wisdom of your professorial group. Together they will make great contributions.

The medical faculty of the University of Maryland has led in many fields: medical journalism, medical libraries, independent chairs for the teaching of diseases of women and children and for instruction in eye and ear diseases. When the demand became insistent for higher standards in pre-medical education and in medical training the University of Maryland assumed a leading rôle.

The people of Maryland have had wise leaders. In no single respect has greater wisdom been shown than in the erection of your University Hospital in the largest city of the state. By its very location, you have been saved a plunge into lavish expenditure that has hung a veritable financial millstone around the educational necks of some of your sister states. While there may be some advantage in the rubbing of academic elbows with your colleagues on the faculties at College Park, you have the obvious advantage of a generous amount of clinical material available for teaching, of a distinguished faculty, which, if transported and set up with equal power in one of your smaller communities, would require from the State of Maryland an additional expenditure of several hundred thousand dollars per year.

Hospitals are somewhat like people. At times they are temperamental, jittery, seemingly unkind. But like people they possess souls. An unselfish singleness of purpose cannot but weld an institution into something that possesses both human and humane attributes.

Henry Van Dyke relates in his "By the Waters of Babylon" the story of Arteban who came across a dying stranger on the edge of the desert. He recognized in the "pallid skin yellow as parchment" the fever that came out of the swamps in the autumn (malaria). Sensing that the sick man was beyond human aid, he turned to leave. Suddenly "the brown, bony fingers closed convulsively on the hem of his coat." Arteban reasoned that his errand—"the search of one who is to be born king of the Jews"—did not permit him to stay; he also knew that if he did not stay the man would surely die. In spite of the urgency of his mission, humanity won, and Arteban, a Magus and a physician, ministered to the wants of the poor, sick Hebrew. "Hour after hour he labored as only

a skilful healer of disease can do, and, at last, the man's strength returned. . . ."

It is the old story of the good Samaritan and is repeated a million times a day by physicians, nurses and all those who care for the sick in this heedless, tumultuous world of ours. Tens of thousands of trained, self-sacrificing ministers to the sick give each day, a large part of their time and effort, to public welfare and to the advancement of science, seeking the conquest of disease—all without thought of personal recompense. One is tempted to indulge in superlatives in contemplating the potential value of this University Hospital to the people of Maryland and to society at large. It will help to train not *good* physicians, but *better* physicians. In the course of time it will directly or indirectly touch the lives of every family in this great state.

Medicine is an all embracing science. It draws heavily upon physics, chemistry, biology, mathematics, psychology, sociology, law and even divinity. And so every department of your university will integrate into your medical faculty, and into the activities of this hospital.

Medicine has not yet been mastered by the rules of trade, and if human welfare is to be served, it must never become so. Idealism must be held boldly in the foreground, as medical service is an individual service. It can neither be purchased in a shop nor delivered in a package. With this one exception (and in no sense would I belittle business), this hospital and this school will somewhere along the line serve as a benefactor to all of us. This is guaranteed by the traditions of your school and of the university, by the high standard of personal and professional attainments of the faculty and by the vision of those who, by their dreams and industry, have brought this beneficent project to so successful an issue. The medical faculty of the University of Maryland has held aloft the ideals of the founders of the school and has added new laurels with the passing years. The people of the State of Maryland have contributed generously. But they and succeeding generations owe a great debt to those persons who with far-sighted vision projected this enterprise and helped in its birth. Of this hospital may it be said forever in the words of Oliver Wendell Holmes:

"Here stand the champions to defend
From every wound that flesh can feel;
Here science, patience, skill, shall blend
To save, to calm, to help, to heal.

"Not ours to ask in freezing tones
His race, his calling, or his creed;
Each heart the tie of kinship owns,
When those are human veins that bleed."

REMARKS AT THE DEDICATION EXERCISES OF THE NEW UNIVERSITY HOSPITAL

DECEMBER 15, 1934

By ALAN M. CHESNEY, M.D.¹

BALTIMORE, MD.

President Pearson, Members of the Board of Regents, Distinguished Guests, Ladies and Gentlemen: My associates of the Johns Hopkins University, whom I have the honor of representing on this occasion, deeply appreciate the privilege of sharing in the dedication of the new University Hospital. From them I bring to their colleagues of the Medical Faculty of the University of Maryland a cordial message of hearty congratulations, best wishes and deep affection.

We of the Johns Hopkins have a particular interest in these exercises because they relate to a field which we also cultivate—the field of medical education. We feel that an unusual significance attaches to the dedication of this particular hospital, and it is proper that I should acquaint you with our interpretation of this important event.

To do so it is necessary for me to remind this audience that it has assembled here, not to dedicate just another hospital to care for the sick of this community, but to dedicate a hospital which is a part of a medical school, one which is primarily devoted to the high purpose of medical education, what we call, in short, a teaching hospital. The compelling reason for building this hospital was that it was needed for the important business of training doctors. That is why it was built by the State out of public funds and that is why these exercises take on for us an unusual significance.

In my opinion there are two important deductions which can be made from the fact that the State of Maryland has built a new teaching hospital of its own. The first of these deductions is that the State of Maryland is in the business of medical education to stay. I, for one, hold that the State of Maryland was fully justified in entering the field of medical education and in doing so exhibited a commendable degree of enlightened self-interest. The other deduction,

which I would regard as a corollary of the first, is that having undertaken the business of training doctors, the State of Maryland must carry on that business to the best of its abilities, and must discharge its duties in that direction in a manner that befits its high position. There can be no question but that it is the plain duty of this State to support its own Medical School in a decent fashion. To my mind any other attitude is unthinkable.

Now when I say that it is the business of the State of Maryland to support its own Medical School in a proper manner, I do not mean by that word "State" merely our governmental machinery, that is to say the executive officers, or the legislative representatives; I mean by the words "State of Maryland" the ordinary citizens of Maryland, persons such as you and me. For, ladies and gentlemen, in the final analysis, no matter what the executive officers or the legislative representatives may think or say, *we citizens* are the State of Maryland, and this is one of our undertakings. We have entered the field of medical education for a good and sufficient reason—because we want good doctors; we have built this hospital with our money because we need it to help train good doctors, and we must now see that it receives from us, within the measure of our means, all legitimate support, in order that it may fully serve the purpose for which *we* have caused it to be built. I would emphasize the fact that this new hospital is *not* the property of the staff to which it is entrusted, nor is it the property of any State official, high or low; it is *our* property, and what it becomes will depend to no small extent upon the support we citizens of Maryland give it.

I would also emphasize the fact that the completion of this new hospital does not by any means fulfill the needs of the Medical School of the University of Maryland. That school also requires other facilities—among them a psychiatric hospital of its own, and we Marylanders must find the funds with which to build such a hospital.

It has been thought by some in the past that there is no real need for two medical schools in Baltimore, that one would be sufficient for the task of training doctors for this community's needs. I am not one of those who holds that opinion, and I think there are few who hold it now. There was a time, some twenty-five or thirty years ago, when there were too many medical schools in Baltimore, but that is not the case today. In my judgment there is

¹ Dean, Johns Hopkins University School of Medicine.

abundant need and abundant room for both schools. It is not necessary for me to say that they can and do live and work harmoniously side by side. That fact is known to everybody. Engaged in a common enterprise, they are accustomed to take counsel together, and what touches one, whether for good or ill, touches the other. It is for that reason that my colleagues of the Johns Hopkins University rejoice in the completion of this splendid new hospital of the University of Maryland, and do give it hail.

Dedicating a building is in many respects like christening a new baby. In both instances we have a ceremony to which we invite interested friends, we invoke the benefit of clergy, we inspect the new arrival, we compare it (privately of course) with its predecessors, we congratulate the parents, and perhaps drink a toast to its health and future prosperity. There is one difference between the two ceremonies, however. In christenings provision is made for the appointment of either a god-mother or a god-father, or both. No such provision is made in the dedication of a building, but it seems to me high time to correct this defect. If the University of Maryland desires to have a god-mother for its latest offspring, I claim that office for the Johns Hopkins University.

THE NEW UNIVERSITY HOSPITAL

The new University Hospital was dedicated on December 15, 1934. Dr. Irving S. Cutter, dean of Northwestern University School of Medicine, gave the dedicatory address. Other speakers included His Excellency Albert C. Ritchie, governor of Maryland, Reverend Dr. Arthur B. Kinsolving, rector of Old St. Paul's Church, Dr. Alan M. Chesney, dean of Johns Hopkins School of Medicine, and Dr. Raymond Pearson, president of the University of Maryland.

The Hospital is ten stories high, with the center portion extended as a tower to provide five extra floors. The building is in the shape of a cross with wings radiating in four directions from a common center. The laboratories and the special departments have been concentrated on the second floor. The arrangement of the space from the second to the eighth floor has been designed for teaching while the ninth and tenth floors takes care of the private and semi-private pay patients. The Hospital will take care of 394 patients. Seventy-one beds are private, sixty-five for semi-private and two hundred and fifty-eight for ward patients.

Following the exercises which were held at the Peabody Institute, the building was opened to the public. The visitors were greeted by Dr. R. A. Pearson, president of the University of Maryland, and Mrs. Pearson, and Dr. J. M. H. Rowland, dean of the Medical School. Others in the receiving line were: Dr. and Mrs. R. McC. Chapman, Dr. and Mrs. Eduard Uhlenhuth, Dr. and Mrs. C. L. Davis, Mr. and Mrs. John E. Raine, Dr. and Mrs. A. M. Shipley, Dr. and Mrs. Clyde A. Clapp, Dr. William S. Gardner, Mrs. Cyrus F. Horine, Mrs. J. Charles Linthicum, Dr. and Mrs. A. J. Lomas, Dr. and Mrs. M. C. Pincoffs, Dr. Randolph Winslow, Mrs. Charles R. Posey, president of the Woman's Auxiliary Board of the University Hospital, and Miss Annie Crighton, superintendent of nurses, University Hospital.

THE UNIVERSITY HOSPITAL

On June 10, 1823, the cornerstone of an institution for the care of the sick was laid at the southwest corner of Greene and Lombard Streets, Baltimore, Maryland. This building when completed was called the Baltimore Infirmary, a cognomen that it bore for at least half a century. It was founded by the Faculty of the Medical School of the University of Maryland and not by the State, and it is believed to have been the first hospital owned by any Medical School in the United States, as well as the first general hospital in this city. It was originally a small building, having only four wards but additions were made from time to time which greatly increased its capacity. During the Civil War it was used by the Union Army as a hospital and tents were placed in the yard for the accommodation of sick and wounded soldiers. The hospital as thus established continued in existence until it was demolished in 1896, a period of 73 years. During this long term successive generations of physicians and surgeons served the cause of humanity and science within its walls and successive classes of students received their practical instruction in its wards. Here labored Davidge and Potter, imposing figures in their day; here Nathan R. Smith, familiarly called the "Emperor," shed luster on the hospital and school, for a period of nearly 50 years, by his surgical skill and his towering reputation; here William Power, and Charles Frick taught and wrought, but whose brilliant gifts could only be exercised for a limited period, when at a premature age they fell asleep. Dr. Power is said to have been the first

to introduce auscultation and percussion into this city; while Dr. Frick was an original investigator in diseases of the urinary organs, whose observations are still held in high repute.

The elder Chew, the worthy sire of a worthy son; the courtly McSherry; Christopher Johnston, the surgeon and scientist; Julian J. Chisolm, the eminent oculist and teacher; the eloquent and chivalrous Miles; the genial Michael; all left their impress on the institution and on their students. Tiffany, the eminent surgeon, and I. E. Atkinson, the clinician, both learned and taught their art in the old Hospital. Samuel C. Chew, the scholar and the revered professor, lectured and taught here for almost 50 years. George W. Miltenberger, the great physician and obstetrician, established the obstetric department of the hospital, which has now attained to enormous proportions. Dr. William T. Howard, the first professor of gynecology in any medical school in this country, was a vast encyclopedia of professional lore which he imparted in a peculiarly impressive manner to his students. He was succeeded by Dr. Thomas A. Ashby, who introduced new methods in his department, and who was a veritable tower of strength in the institution. Charles W. Mitchell, the erudite and eloquent professor of pediatrics and clinical medicine, also was an ornament of the hospital.

My first acquaintance with the Infirmary was made on October 2, 1871, when I entered the University as a medical student, and I had an almost continuous connection with it, in some capacity, until the present time. In 1876 the long Greene Street wing was built through the means of a Legislative appropriation. About 1890 another wing was built for a nurses' home but which is now occupied as an obstetrical hospital. A special building was erected in 1870 for resident students or internes and other changes were made from time to time; but the times changed, "*tempera mutantur, et nos mutamur in illis.*" The old Infirmary had outlived its usefulness and new conditions confronted us. How shall these be met? On February 6, 1896, the first definite steps were taken in this direction. From the minutes of the Faculty of Physic of that date, I make the following extract. Professor Winslow moved: "That a committee of 3 members of the Faculty be appointed by the chair, whose duty it shall be to investigate as to the possibility and method of erection of a new hospital, and report to the Faculty upon the subject as soon as possible." The president

appointed Professor Coale, the Dean and Professors Atkinson and Winslow. This committee reported favorably upon the project and presented a plan of procedure, which was adopted by the Faculty.

The actual work of rebuilding was begun in August, 1896, and was completed in September, 1897. The old name of Baltimore Infirmary permanently disappeared from the buildings and that of University Hospital was graven over the imposing portal of the new structure. During the reconstruction of the hospital the services of the institution were greatly curtailed but by utilizing the two wings to their fullest extent and by renting several houses on Greene Street for private patients we were able to carry on the work reasonably well. Before the new building was occupied by patients the Faculty gave a large reception to the medical profession and other prominent citizens in order to give them an opportunity to inspect the handsome, new structure. In mentioning those connected with the erection of the new University Hospital it would be invidious to omit the names of Dr. St. Clair Spruill, Medical Superintendent, and Miss Janet Hale, Superintendent of Nurses, to whose active and intelligent cooperation much of the success of the undertaking was due. The first operation in the new building was performed by Professor J. Holmes Smith early in September, 1897, and from that time the work of the hospital rapidly increased. Since that time many additions and improvements have been made in the internal arrangements of the institution, which have greatly increased both the ability of the hospital to care for a larger number of patients and the introduction of the most modern methods of diagnosis and treatment.

Governor Edwin Warfield was greatly interested in the hospital and during his incumbency of the executive chair a substantial appropriation was secured from the Legislature, with which a new power house and dormitory was erected; while a large and commodious Nurses' Home has been established across the street for the accommodation of the nurses, which in honor of the late Miss Louisa Parsons, who was the first Superintendent of Nurses, has been called the Louisa Parsons Home, which was opened in 1922.

With the erection of the new hospital, a new era in the life of the institution began, and, indeed, a new cycle in the history of the medical school took its start. Of all those who were

connected with the undertaking the present writer alone survives though Dr. L. Ernest Neale, the learned and impressive professor of obstetrics, was appointed to his chair about that time and still lives to enjoy his "otium cum dignitate." Among those whose work is entitled to especial mention is the late Dr. Frank Martin and the late Dr. J. Mason Hundley, each of whom labored faithfully in the hospital.

The World War involved us in the struggle in 1917, and a large number of the staff entered the service of their country, leaving the hospital largely depleted of its physicians, surgeons, nurses and assistants, but those of us who were too old for military duty or who were disqualified for one cause or another continued to bear the burden and awaited the coming of a better day. The University of Maryland Unit or Field Hospital No. 42 returned in 1919, after having performed highly meritorious services in France and soon the gaps in the staff of our hospital were again filled.

In 1920 the Regents of the University of Maryland and the Trustees of the Maryland State College agreed to a consolidation in order to form a State University. This desire was presented to the Legislature and a bill was passed granting the petition, which was signed by Governor Albert C. Ritchie and the property of both institutions was turned over to the State.

The University Hospital is therefore no longer a private institution but is owned by the State of Maryland, and it derives great benefit from its change of ownership. This main building was built by the Medical Faculty, by means of an issue of bonds, which will fall due in 1936, and without any aid from the state. The only reminder of the old Baltimore Infirmary that is left is the flight of granite steps extending from the street to the first floor of the present structure; these steps after serving three-quarters of a century were found to be in such perfect condition that they were replaced and still give access to the building.

As far as is known there were no graduate resident physicians until 1846 when James Morison, M.D., was appointed and served until 1850. This Dr. Morison, however, must not be confused with Dr. James M. Morison, who graduated in 1859, and who entered the United States Army and served during the Civil War and through the Indian Conflicts and was com-

missioned a Brevet Major General for meritorious services. Only recently an oil painting of the General, his two swords and two of his commissions have been presented to the Medical School and now hang in the Dean's office. In this connection, I may state that Dr. Philip S. Wales, who graduated in 1856, served a term as Surgeon General of the Navy and that Dr. Rupert Blue, who graduated in 1892, entered the Public Health Service and, after rendering heroic service in stamping out bubonic plague in California, was appointed Surgeon-General of the service and subsequently was elected President of the American Medical Association. All of these officers gained at least a portion of their clinical training in the Baltimore Infirmary.

Time and space do not permit the mention of many other physicians and surgeons who have obtained a large part of their training in the University Hospital, but I may call attention to the extraordinary skill of one of our more recent graduates who is now one of the chief surgeons at the Mayo Clinic, at Rochester, Minnesota. I refer to Dr. Fred W. Rankin, who has rapidly forged to the front and whose ability and skill are recognized at home and abroad.

The present hospital has a capacity of 250 beds and it is crowded to repletion, hence the Legislature of 1931 appropriated \$1,500,000 towards the construction of a new building, which will be able to house 450 patients. The plans have been drawn but work has not yet been started and I must leave the description of the projected institution to a future historian.

During the 109 years of the existence of the Baltimore Infirmary and the University Hospital it has faithfully served the citizens of this city and state and those of many other states as well, and its doors have never been closed. Its physicians and especially its surgeons have not only served without pecuniary compensation, but have ever been ready to answer the call of service, by day and by night. Without endowment and with but little aid from the city and state, it has been kept up, with a large degree of efficiency, by the successive members of the Faculty of the University of Maryland often with a large measure of self-denial. It is now the property of the State and already the dawn of a new era appears on the horizon.

RANDOLPH WINSLOW, M.D.

Con't from p. xxx

Dr. Holland came of English ancestry on both sides of his family. He was the son of Dr. John Thomas and Priscilla Atwell Holland. His grandfather was William Holland and his grandmother Rachel Harwood. His father was a native of Queen Anne County, Maryland, and it was here that Dr. Holland was born. He was related to many of the old families of Virginia, Delaware and the Eastern Shore of Maryland. There are many Hollands in England at the present time and we saw the name Holland a number of times on the Menin Gate, which is the memorial at Ypres to the unknown British dead, who fell in Flanders field.

Dr. Holland entered the Medical School very much better prepared than the average medical student of his time. He had attended Washington College at Chestertown, Maryland, one year and entered the Wilmington Academy at Dover, where he graduated in 1889. He then taught school three years. Two of these years he lived at his father's home and was strongly influenced by this association.

Dr. John Thomas Holland, Dr. Holland's father, graduated in medicine from the University of Maryland in the class of 1862. The title of his thesis for graduation was "*Vis Medicatrix Naturae*," and in style and content gave evidence of good foundation and unusual acumen. In these latter days, when requirements for the study of medicine have become so advanced, there are many senior students who could not give so good an account of themselves as Dr. Holland did in his essay. He practised medicine in Princess Anne and his conception of the science and art of medicine was many years ahead of his time. He was so distressed by the ignorant methods of his day and the tendency to the support of quackery on the part of the public, that he wrote a book on "*Rational Medicine Versus Quackery*." This book was never published, but Dr. Joseph Holland had it typewritten and bound and it is a part of his library.

He was one of the first physicians in the country to advocate the open air treatment of tuberculosis by forced feeding and was very much criticized in his community, because he insisted that his patients keep their windows open and spend as much time as possible in the sun and out of doors. His chief impatience, however, was because of the ignorance of so many physicians and the widespread prevalence of quackery. Altogether the older Holland was

a very unusual man. Practicing medicine as he did quietly in a country community, his thoughts and actions ran far ahead of his generation. It is interesting to note that in the catalogue of 1862, only seventy-three operations were performed in the Baltimore Infirmary, which was the forerunner of the University Hospital and only three of these could be called major operations, two amputations of the thigh and one excision of the breast.

Dr. Joseph William Holland graduated from the Medical Department of the University of Maryland in 1896. He was Clinical Assistant in 1895-96, and in 1896-97 was Second Assistant Resident Physician, and in 1897-98 was Resident Physician in the University Hospital. In 1898-99 he was at first Assistant Superintendent and afterwards Medical Superintendent. In 1899-1900 he was Medical Superintendent in the City Hospitals at Bay View. He gave a good account of himself during the year he was in the City Hospitals. He reorganized the service, started a pathological museum and altogether showed those qualities that were later to characterize all his work. In 1901 he began private practice and was Lecturer in Clinical Surgery and visiting surgeon at Bay View. In 1902-03 he was made Demonstrator of Anatomy and Lecturer in Clinical Surgery and taught Osteology. He was also attending surgeon to Bay View and Demonstrator of Anatomy in the Dental Department and continued in these positions until 1908. The simple reading of this list of appointments shows his industry and interest in the art of teaching. In 1908-09 he was made Associate Professor and Demonstrator of Anatomy and Lecturer of Clinical Surgery and Osteology and Associate Professor and Demonstrator of Anatomy in the Dental Department and continued in these positions until 1915, when he was made attending surgeon to the University Hospital and took over one of the services in surgery. In 1920 he severed his connection with the Anatomical Department and became Clinical Professor of Surgery. From this time on he carried a heavy burden of surgical teaching. Not only was he in charge of a part of the hospital service, but taught in the dispensary two days a week a greater part of this time and was Head of the Department of Topographic and Surgical Anatomy, in which fields he did teaching of the highest excellence and value. His long training as Demonstrator and Associate Professor of Anatomy had given him a rare knowledge of the structure of the

human body and his work for the last nine years in this department has been of an outstanding nature.

During the war he was a member of the commission whose duty it was to examine physicians who were volunteering for service with the Medical Corps of the Army. He volunteered for service in the Medical Corps of the Army in April, 1917, and was commissioned in May. He was not ordered out for active duty, however, because the University authorities asked that he be put on the list of teachers whose services could not be spared. In addition to these other duties he served on numerous committees, taught surgery to the nurses and occupied, in many respects, the most responsible and influential position in the Surgical Department of the University Hospital.

He was married June 20, 1906, to Miss Pearl Huntington Robins, the daughter of Mr. and Mrs. Harrison Robins, who survives him together with a sister, Mrs. Clarence Tucker and two brothers, Mr. John Thomas Holland of Centerville, Queen Anne County, and Mr. George A. Holland of Frederick County.

When Ex-president Elliott of Harvard was asked to name a text for the Library of Con-

gress he selected a passage from the Prophet Micah, "What does the Lord require of thee?" As to how Dr. Holland answered this question instinctively and unconsciously in his daily life can best be stated by recalling one of the incidents of Christ's ministry—"And behold, a certain lawyer stood up and tempted him saying 'Master, what shall I do to inherit eternal life?'" Then followed one of the finest lessons in ethics in all literature—the parable of the good Samaritan, at the end of which Christ asked in turn "Which now of these three, thinkest thou, was neighbor unto him that fell among the thieves?", and the lawyer answered "He that showed mercy on him."

In action and in speech Dr. Holland was a fine example of that profession which Stevenson said "stands above the common herd and is the flower of our civilization." It was of such men that the Bard of Avon was thinking when he said, "Still in thy right hand carry gentle peace to silence envious tongues."

"Life is too short to waste
In critic peep or cynic bark
Quarrel or reprimand,
'Twill soon be dark."

ARTHUR M. SHIPLEY

President's Letter

Fellow Medical Alumni:

A YEAR AGO I was faced with the responsibility of President of your alumni association for the full year ahead and I wondered how well I could cope with the task. Well—the time has flown swiftly and no one can erase the “writings on the wall.” There are some accomplishments and there are “flubs”—intermingled they make up the “minutes.” Certainly the truism is apparent here that “no man is an island” and one leaving this job realizes only too well how much some people give of their time and ability in the support of some causes and organizations. Through the year—the people in the office, Bill Triplett and Mrs. Louise Gerkin. Various people that you call to accept committee responsibilities and to get a specific job done. Howard Mays and I could tell you of tremendous time and effort expended by Jack Sharrett in many details of Alumni Day. It was geared so smoothly that it just seemed natural for it to roll along so well. To the Board members who took the time to attend the meetings and participate in the decisions—I am eternally grateful. I hope that I can sustain the interest in my “has been” year for Parke Scarborough that Gibbie Wells did for me. There are many that I should thank and the fact that I do not record all their names here does not mean that I am any the less grateful to them.

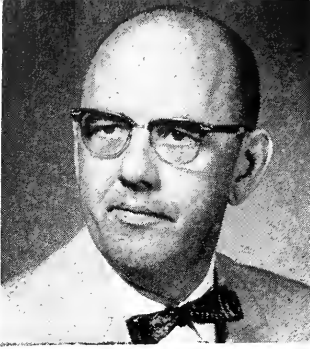
I hope that you all enjoyed Alumni Day as much as I did. So far, all the comments received have been quite favorable. We are indebted to our friends from Puerto Rico for their significant contribution. Our departure from the customary medical or paramedical speaker at the banquet was well received and Mr. Tom McDavid did a fine job for us. I do hope that all of you that made the little extra effort to get here, feel that it was well worth while.

I have had the nicest letter from our Gold Medal Recipient, Dr. Theodore McCann Davis. I only wish that all of you could have had the opportunity to meet him and spend a little time with him and his charming wife as Charlotte and I did. We are most fortunate that each year our committee can seek out such candidates for this award.

I sincerely hope that you all will develop a measure of greater interest in your alumni association and that you will communicate this interest to your new president, Dr. C. Parke Scarborough, and respond to any efforts he may ask of you in his year ahead.

May I thank you for the privilege you all afforded me in serving as your president and wish for a healthy, growing organization of the future.

J. HOWARD FRANZ, M.D.
President

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RENNERT M. SMELSER, M.D.

WILLIAM J. SUPIK, M.D.

JOHN D. YOUNG, JR., M.D.

GEORGE H. YEAGER, M.D.

(ex-officio)

GIBSON J. WELLS, M.D.

*(ex-officio)***Nominating Committee**

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J. HOWARD FRANZ, M.D.

Alumni and Precommencement Activities 1965

THE ANNUAL Alumni Day activities began at the School of Medicine at 8:30 A.M. on Thursday, June 3, 1965. A large turn-out was present and several hundred Alumni registered for the scientific and business sessions which followed. Those who attended are:

Senior Alumni

Edgar B. Friedenwald (P&S) 1903
Ira Burns (UM) 1905
H. L. Criss (BMC) 1905
Wm. Van Landingham (BMC) 1905
Harry A. Cantwell (UM) 1906
Frank V. Langfitt (BMC) 1907
George B. Davis (P&S) 1908
Lester D. Norris (UM) 1908
George C. Coulbourne (UM) 1910
D. J. Cronin (P&S) 1910
J. Walter Layman (BMC) 1910
Walter I. Neller (BMC) 1910
John G. Runkel (UM) 1910
Herman Seidel (P&S) 1910
Wm. H. Triplett (BMC) 1911
Albert E. Goldstein (P&S) 1912
Rafael Bernabe (P&S) 1913
W. H. Toulson (UM) 1913
Theodore M. Davis (UM) 1914
Nolan D. C. Lewis (UM) 1914
Austin H. Wood (UM) 1914

50-Year Class

P&S 1915	UM 1915
R. Basil Linger	Charles A. Cahn
William R. McKenzie	Vincent J. Demarco
Theodore H. Morrison	Louis Diener
Ernest M. G. Reiger	Robert B. Hill
Harry L. Rogers	William H. Jenkins
Paul B. Steele	W. R. Johnson
John M. Thorup	Addison LeRoy Lewis
	Charles H. Moses

Class of 1917

Louis A. M. Krause

Class of 1920

Philibert Artigiani	W. K. McGill
F. X. Banvard	Sm. J. G. Orr
Adolfo Bernabe	D. J. Pessagno
Nathan Davidov	Joseph P. Ponte, Jr.
Louis Dobihal	J. Morris Reese
Harold P. Evans	R. W. Richardson
F. A. Holden	James Wm. Skaggs
Z. Vance Hooper	Fred B. Smith
A. H. Jackvony	Howard L. Tolson
A. M. Janer	I. S. Zinberg
William Lueders, Jr.	

Class of 1922

George E. Shannon

Class of 1924

A. A. Weinstock

Class of 1925

S. P. Balcerzak	John Keating
Leo T. Brown	C. A. Minnefor
Paul Byerly	Joseph Nataro
Abraham Clahr	James W. Nelson
Eva F. Dodge	Henry Oshrin
J. S. Eastland	Jack Sarnoff
Lee W. Elgin	Thomas B. Turner
Francis A. Ellis	M. M. Wassersweig
Harold H. Fischman	John L. Winstead
Samuel S. Glick	C. C. Zimmerman
J. G. Howell	

Class of 1926

Margaret B. Ballard Jacob R. Jensen

Class of 1927

T. Nelson Carey A. H. Finkelstein
E. Eugene Covington

Class of 1928

John C. Krantz Theodore E. Stacy

Class of 1929

George H. Yeager

Class of 1930

Harry Ashman	Abraham Kremen
M. M. Baylus	Frank Lewis
Wm. P. Belinkin	James A. Miller
Joseph S. Blum	Victor J. Montilla
Archie Robert Cohen	Duncan S. Owen
Clay E. Durrett	Zack D. Owens
Vincent J. Fiocco	N. M. Romano
John L. Ford	L. R. Schoolman
M. P. Johnson	Nathan Snyder
Albert A. Kay	N. M. Sperling

Class of 1931

Emmanuel A. Schimunek

Class of 1932

John C. Dumler

Class of 1933

Lauriston L. Keown

Class of 1934

Hugh B. McNally

Class of 1935

J. B. Anderson	John R. Godbey
E. I. Cornbrooks	John C. Hamrick
Robert P. Fruchtbau	Jeanette Heghinian

Lewis C. Herrold
Josiah A. Hunt
Irving Klompus
Saul Lieb
Chas. B. Marek
Howard B. Mays
Karl F. Mech
Philip Owen

Harry M. Robinson, Jr.
Sol Rosen
Sidney Shapiro
Benjamin Stein
Louis H. Teitel
Joseph J. Tuby
Norman J. Wilson

Class of 1936

Harry C. Bowie
George J. Coplin

Walter E. Karfgin
Gibson J. Wells

Class of 1937

B. Highstein
Isadore Kaplan
Ephraim Lisansky

Samuel T. R. Revell
C. P. Scarborough

Class of 1938

John A. Wagner
Theodore E. Woodward

Class of 1939

Wm. H. Kammer, Jr.

Class of 1940

Daniel C. Barker
Lester Caplan
Edwin O. Daue, Jr.
Walter R. Graham
Luis R. Guzman-Lopez
Ben H. Inloes, Jr.
Julian G. Kirchick
Edward L. J. Krieg
Robert E. Lartz
F. Ford Loker
H. P. MacCubbin
Wm. D. McClung

Joseph Miceli
Guillermo Pico
Ross Z. Pierpont
William R. Platt
Conrad L. Richter
Raymond C. V.
Robinson
Wm. J. Supik
W. H. Townshend
R. T. Williams
Wm. I. Wolff

Class of 1941

Francis S. Renna
John D. Young, Jr.

Class of 1942

J. Howard Franz
J. C. Furnari

Theodore Kardash

Class of 1943

Ruth W. Baldwin

Class of 1944

R. A. Cowley
Wm. Carl Ebeling

Donald W. Mintzer
Charles E. Shaw

Class of 1945

George H. Anderson
Eugene H. Conner
Vincent DeP.
Fitzpatrick
Helen E. Greenleaf
John A. Hedrick

Henry F. Maguire
Paul R. Myers
Alfred S. Norton
W. H. Pike
Edward J. Sokolski
W. L. Summerlin

Class of 1946

Harold Cano
Thomas B. Connor

Joseph D'Antonio

Class of 1947

Gilbert M. Carouge

Class of 1949

Howard F. Raskin

Class of 1950

Francis J. Borges
L. Guy Chelton
Jos. Robert Cowen
W. A. Cracraft
Harold L. Daly
Miriam S. Daly
Elinor W. Demarest
L. M. Demarest

Fred Edmunds
Virginia Huffer
Frank T. Kasik
Wm. B. Rever, Jr.
Paul F. Richardson
Henry H.
Startzman, Jr.
Wm. H. Yeager

Class of 1951

Mario R. Garcia-
Palmieri

Ricardo Mendez-Bryan

Class of 1952

David E. Graham
John Sharrett

Class of 1954

Robert B. Goldstein
David A. Levy

Harold R. Weiss

Class of 1955

Philip Brunschwyler
Donald H. Dembo
G. T. Gilmore
Gary S. Goshorn

James T. Keegan
Anthony A.
Lewandowski
Charles B. Pratt

Class of 1956

C. Earl Hill

Class of 1957

Stuart J. Abrahams

Class of 1960

A. C. Alevizatos
John J. Bennett
Sherrill C. Cheeks
Jeremy Cooke
Donald W. Datlow
Paul A. DeVore

Julio E. Figueroa-Lugo
I. William Grossman
Clinton L. Rogers
Elijah Saunders
Lois A. Young

Class of 1962

Arthur W. Traum

Class of 1963

David Braver

Faculty

Frank H. J. Figge
Vernon E. Krahrl

Guests

Mr. and Mrs. Mueller (Parents of J. G. Mueller)

The proceedings were called to order at 10 A.M. with Dr. J. Howard Franz, President, presiding. Dean William S. Stone of the School of Medicine then gave a brief résumé of accomplishments and plans of the Medical School during the past year. One of the highlights of the morning session was a statement of greeting by Dr. Guillermo Pico, Professor and Chairman of the Department of Ophthalmology at the University of Puerto Rico

School of Medicine and an Alumnus of the School of Medicine. Dr. Pico's remarks began as follows:

Ladies and Gentlemen:

I bring to you the greetings of the Puerto Ricans who have graduated from the School of Medicine of the University of Maryland. At this opportunity I wish to express to the authorities of this University and of the State of Maryland the gratitude of all Puerto Rican graduates for the generosity of this University in accepting us to study here. Before 1950, Puerto Rico did not have a Medical School and the students from Puerto Rico were coming to study medicine in the States. It was difficult to obtain admission to the different medical schools because it is well known that the number of applicants is many times the number of students that can be enrolled. However, the University of Maryland gave the Puerto Rican applicants a sort of privileged consideration, and in every class there were several students from Puerto Rico. Over the years more than a hundred physicians have been graduated from here and have returned to Puerto Rico to provide medical care for its people. There are more Puerto Ricans graduated from Maryland than from any other medical school. The University of Maryland has produced many distinguished physicians for Puerto Rico. The majority of the Professors and Chairmen of the Departments in the School of Medicine of the University of Puerto Rico and very many others in the medical faculty are graduates of Maryland. Others have distinguished themselves in the different fields of the practice of medicine. Still others have been leaders in the Medical Association, including eight past presidents. Many others have been prominent in civic activities and in politics. The present Chairmen of the Health Committees of the Senate and of the House of Repre-

sentatives of our Legislature were graduated from this Medical School. Dr. Antonio Fernos, who was graduated fifty years ago and is now the Chairman of the Health Committee of the Senate of the Legislature of Puerto Rico, is here with us today.

Even after Puerto Rico started its medical school in 1950, Maryland continued to accept some of our students every year, because the needs for physicians in Puerto Rico cannot be supplied completely by the limited number who graduate there.

All this extraordinary generosity of Maryland and its medical school deserves public recognition from all Puerto Ricans. To this effect I have brought with me letters from the Honorable Governor of Puerto Rico to the Honorable Governor of the State of Maryland, from the Dean of the School of Medicine of the University of Puerto Rico to Dr. William S. Stone, Dean of the University of Maryland School of Medicine, and from the President of the Puerto Rico Medical Association to Dean Stone. With these official letters from Puerto Rico comes the love and deep gratitude of the Puerto Rican Alumni to this, their Alma Mater. The people of Maryland should know that their medical school has not only distinguished itself by producing physicians to fulfill the needs of this State, but also has contributed so much to help the people of Puerto Rico.

These remarks were followed by the Scientific Session which included two papers.

1. "The Clinical Picture of *Schistosomiasis mansoni*" by Dr. Mario R. Garcia-Palmieri, Professor and Chairman of the Department of Medicine of the University of Puerto Rico School of Medicine.
2. "Etiology, Pathogenesis and Treatment of Pterygium," by Dr. Guiller-

CAMERA VIEWS ALUMNI WEEK 1965



Dr. J. Howard Franz, President, Medical Alumni Association, addresses the general sessions.



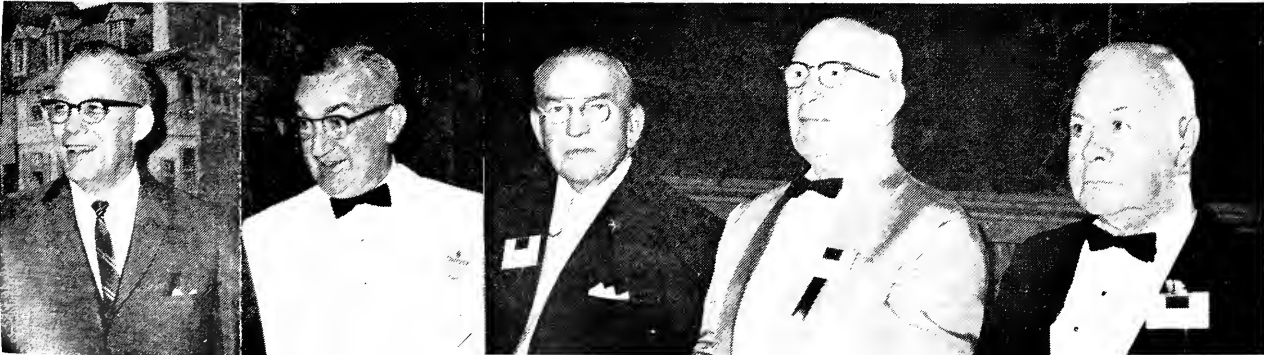
Dr. Mario Garcia Palmieri, Professor and Chairman of the Department of Medicine, University of Puerto Rico, Dean Stone, and Dr. Guillermo Picó, Professor of Ophthalmology, University of Puerto Rico.



Dr. Thomas C. Cimonetti, President of the Class of 1965, greets veteran alumnus, Dr. Maurice E. Shamer of the Class of 1910.



Dr. Henry F. Maguire, '45, of San Diego, California, and Dr. J. Morris Reese, '20, of Baltimore.



Drs. Norman T. Wilson and John C. Hamrick of the Class of 1935. Drs. Charles H. Moses '15, U of M, Paul B. Steele, '15 P.&S. and W. Raymond McKenzie, '15 P.&S.



Dr. Margaret B. Ballard, '26.

From Class of 1920; bottom row, Drs. William Landers, Nathan Davidov, Al Holden; middle row, Drs. Zev Hooper, W. J. B. Orr, and Joseph Ponte, Jr.; top row, Drs. Albert H. Jackvony, Louis Dobihal, and Jas. Wm. Skaggs.



Drs. James H. Franz, Theodore H. Davis, recipient of Alumni Award and Gold Key, and Dean William S. Stone.



Dr. John C. Dumler and son J. C., Jr.



Dr. John C. Krantz, Jr., and Dr. Lois A. Young



Dr. Harry M. Robinson, Jr., '35, with daughter, E. Ann, a member of the Class of 1965.



Front row, left to right; Drs. Rafael Bernabe, Guillermo Pico, Victor Montilla, Julio Figueroa, Roberto Janer, Adolfo Bernabe, and Mario R. Garcia-Palmieri. Back row, Drs. Luis Guzmán-López and Ricardo Méndez-Bryan; all Puerto Rican Alumni.

mo Pico, Professor and Chairman of the Department of Ophthalmology, University of Puerto Rico School of Medicine.

The Annual Business Meeting was highlighted by the presentation of the Alumni Honor Award and Gold Key to Dr. Theodore McCann Davis, Class of 1914, world famous urologist.

This was followed by the posting of the necrology, recorded below :

NECROLOGY ROSTER, 1964-65

Allgood, Reese A.	1912
Alonso, Miguel	1935
Bridgers, Harvey C.	1915
Bishop, James R.	1904
Bonner, John B.	1918
Blaisdell, Russell E.	BMC 1906
Byrne, Ignatius P. A.	1916
Baptist, Harry L.	1897
Berlin, Lewis	P&S 1901
Bardfeld, Benjamin B.	1929
Banner, Charles W.	1899
Cole, Lewis F.	1916
Carman, Fletcher F.	BMC 1901
Coughlan, Stuart G.	1937
Craig, Joseph Sherman	P&S 1912
Cloninger, Kenneth L.	1931
Callaghan, Adlai E.	P&S 1915
Cloward, Ralph E.	P&S 1913
Carey, Richard A.	1942
Darby, William Arthur	1918
Davis, Frederick W.	P&S 1905
Dunne, Thomas B.	1943
Dean, Russell H.	1912
Dailey, Edward M.	P&S 1904
Dunne, Edward P.	1916
Desmond, Dennis M.	BMC 1892
Edwards, Charles Reid	1913
Edwards, Vertie E.	1913
Edwards, Arthur J.	1899
Evans, Edward B.	BMC 1897
Fassett, Burton W.	BMC 1898
Goldberg, Sigmund	1937
Gollick, William A.	1922
Gordy, Lyle L.	1915
Gonzalez, J. F.	1916
Giesen, John J.	1918
Greer, Creed C.	1928
Gordon, Herbert	1922
Glenn, Lucian N.	1897

Hunter, William Byrd	P&S 1910
Hudson, Rollin C.	1930
Houck, Henry C.	1905
Hanrahan, William R.	P&S 1905
Kilborn, Joseph B.	P&S 1911
Kimsey, Fritz J.	P&S 1912
Knipp, George A.	1923
Krosnoff, Michael A.	1931
Keating, Thomas F.	P&S 1910
Kappelman, Melvin D.	1939
Leibensperger, George F.	1925
Louft, Reuben R.	1932
Leitz, T. Frederick	P&S 1907
Lass, Louis	1921
Linhardt, Oscar V.	1915
Legg, Thomas H.	1907
Laino, Frank A.	1935
Moose, Frank M.	P&S 1914
Morris, Philip	1924
Marino, Frank C.	1916
Miller, Clarence L.	1938
Morrison, William H., Jr.	1924
Michel, William	1912
Morris, Richard H.	BMC 1896
Matthews, Otto S.	1946
Mathesheimer, Jacob L.	BMC 1907
May, William T.	P&S 1913
McClung, James A.	BMC 1901
McElhattan, Joseph	1906
McCallion, William H.	P&S 1915
Nolt, Ernest V.	1908
Noll, Louis	1922
Nolan, Francis F.	1917
Putterman, Morris N.	1918
Patteson, Thomas E.	BMC 1909
Peck, Joseph C.	P&S 1907
Podall, Harry C.	BMC 1908
Preston, Desausser G.	P&S 1907
Perry, Clayton C.	1920
Reitzel, Elbert C.	1917
Rollins, Clarence D.	BMC 1905
Reckson, M. Murray	1932
Rutrough, Joseph C.	BMC 1910
Sacks, Milton S.	1934
Siegel, Milton	1934
Stroble, Walter G.	P&S 1908
Seymour, William S.	1895
Squires, Millard F., Jr.	1936
Schmitz, William J.	P&S 1907
Swann, Joseph F.	P&S 1896
Schneider, George A.	BMC 1906
Smith, Leo L.	1917
Staley, Elmer B.	P&S 1915
Schwartz, Myer	1902
Sima, Charles E.	1915

ALUMNI ASSOCIATION SECTION

Temple, Robert T.	P&S 1906
Upton, Hiram E.	1927
Vogel, S. Zachary	1928
Wolff, Carl O.	1917
Woodall, Rufus E.	P&S 1915
Warner, Howard H.	1914
Whisler, Horace A.	P&S 1908
White, William Kelso	1902
Walsh, William S.	1914
Walton, Henry J.	BMC 1906
Wilson, James E.	P&S 1904
Yocum, Alfred W.	BMC 1912
Zeiger, Samuel	1930

During the Business Meeting, it was announced that Dr. Margaret Ballard had completed a historical sketch of the School of Medicine and that this would be ready for publication. The Alumni Association heartily indorsed Dr. Ballard's work and agreed to lend support to this important undertaking. It is expected that the historical sketch will be ready for publication early in 1966. Due notice of this will be carried in the BULLETIN.

The Business Meeting was followed by the usual Alumni Luncheon and inspection of the School of Medicine. During the evening of Alumni Day, the Annual Banquet was held at the Lord Baltimore Hotel with more than 400 persons attending. Members of the Class of 1915 and of the graduating class of 1965 were honored guests. The speaker of the evening was Mr. Tom McDavid, Vice President of Commercial Credit Corporation of Baltimore, who spoke on "The Sin of Procrastination."

On the morning of June 5, activities centered about the School of Medicine again as the Class of 1965 prepared for its precommencement activities. These activities were held on the grounds of the University Hospital.

Following a brief musical program by the Nurses Choir, Dean Stone presented the graduating class for the administration of the Oath of Hippocrates. This was fol-

lowed by the awarding of honors. These are listed as follows:

Faculty Gold Medal (Summa Cum Laude)
Timothy Kenney Gray

Certificate of Honor (Magna Cum Laude)
Zalman Stephen Agus

Certificates of Honor (Cum Laude)
Henry Allan Saiontz
William Edson Signor
Richard William Virgilio

Balder Prize for Excellence in Medical Studies
Timothy Kenney Gray

Dr. Leonard M. Hummel Medal for Excellence in Internal Medicine
Richard William Virgilio

Robinson Dermatologic Award for Excellence in Dermatology
Earl Samuel Shope

Dr. Wayne Babcock Prize for Excellence in Surgery
Phillip Paul Toskes

Dr. A. Bradley Gaither Prize for Excellence in Genito-Urinary Surgery
Calvin Embert Jones, Jr.

Dr. Milton S. Sacks Memorial Award for Excellence in Medicine and Hematology
Zalman Stephen Agus

Student Council Keys
Bruce Allen Brian
Thomas Curran Cimonetti
Louis Odin Olsen
Donald Cornelius Roane

Student Council Certificates
Brian Jay Baldwin
Bruce Allen Brian
Thomas Curran Cimonetti
Arthur Roland Dick
Carlos Rafael Mendez-Bryan
Louis Odin Olsen
Donald Cornelius Roane
William Edson Signor

Commencement, Saturday, June 5, 1965

Final Commencement Exercises and the awarding of the Degree of Doctor of Medicine was held at 10 A.M. in the Cole Activities Building at College Park, Mary-

land. Members of the Class of 1965 thus joined the long line of Medical Graduates of the School of Medicine extending back to 1807. Following graduation, most of the new physicians departed for a short and well-earned vacation prior to the assumption of their internships. The hospitals where the Class of 1965 will serve their internships are listed as follows:

- AARONSON, JEFFREY D.
Baltimore City Hospitals, Baltimore, Md.
21224
- AGUS, ZALMAN S.
University Hospital, Baltimore, Md. 21201
- ALBERTSEN, VERNER
South Baltimore General Hospital, Baltimore, Md. 21230
- AXLEY, JOHN H., JR.
University Hospital, Baltimore, Md.
- BALDWIN, BRIAN J.
University Hospital, Baltimore, Md.
- BENFIELD, DONALD G.
University Hospital, Baltimore, Md.
- BLUM, STANLEY L.
Sinai Hospital, Baltimore, Md. 21215
- BRIAN, BRUCE A.
University Hospital, Baltimore, Md.
- BROWN, CHARLES S.
Union Memorial Hospital, Baltimore, Md.
21218
- BROWN, JEFFREY L.
Hartford Hospital, Hartford, Conn. 06115
- BRUCE, WILLIAM G.
Mercy Hospital, Baltimore, Md. 21202
- CHOATE, WILLIAM H.
Naval Hospitals
- CHONG, LARRY C.
Baltimore Medical Center, Baltimore, Md.
- CIMONETTI, THOMAS C.
St. Agnes Hospital, Baltimore, Md. 21229
- CLEY, BRENDA M.
Homer G. Phillips Hospital, St. Louis, Mo.
63113
- COLLINS, CHESTER C., JR.
Mercy Hospital, Baltimore, Md.
- COPLIN, MICHAEL N.
Newark Beth Israel Hospital, Newark, N. J.
07112
- DICK, ARTHUR R.
University of Kansas Medical Center, Kansas City, Kans. 66103
- DOUGHERTY, PATRICK F.
Mercy Hospital, Baltimore, Md.
- DU BUY, JEAN B.
University Hospital, Baltimore, Md.
- DUMLER, JOHN C., JR.
University Hospital, Baltimore, Md.
- EHRlich, GARY L.
Grady Memorial Hospital, Atlanta, Ga. 30303
- ENGELKE, GEORGE E.
St. Agnes Hospital, Baltimore, Md.
- FESCHE, PAUL H.
Union Memorial Hospital, Baltimore, Md.
- FINE, LOUIS L.
Sinai Hospital, Baltimore, Md.
- FREY, ALLEN A.
South Baltimore General Hospital, Baltimore, Md.
- FRIEDLER, STANLEY
Sinai Hospital, Baltimore, Md.
- GILLIS, DAVID J.
Mercy Hospital, Baltimore, Md.
- GOLDNER, RONALD
Maryland General Hospital, Baltimore, Md.
- GOLDSMITH, STAN
Los Angeles County Hospital Unit I, Los Angeles, Calif. 90033
- GOULD, WILLIAM M., III
Maryland General Hospital, Baltimore, Md.
21201
- GRAY, TIMOTHY K.
University Hospital, Baltimore, Md.
- HANDWERGER, ROBERT L.
Sinai Hospital, Baltimore, Md.
- HARRIS, DAVID R.
San Francisco Hospital, San Francisco, Calif.
94110
- HARRISON, CHARLES S.
University Hospital, Baltimore, Md.
- HEROLD, FREDERICK S.
Beth Israel Hospital, New York, N. Y. 10003
- HIGHSTEIN, STEPHEN M.
Maimonides Hospital, Brooklyn, N. Y. 11219
- HIMELFARB, TERREN M.
Sinai Hospital, Baltimore, Md.
- HISLEY, JOHN C.
University Hospital, Baltimore, Md.
- HOFFMAN, EDWARD S.
South Baltimore General Hospital, Baltimore, Md.
- HOLTHAUS, ROBERT R.
South Baltimore General Hospital, Baltimore, Md.
- HOWARD, SUSAN L.
University Hospital, Baltimore, Md.
- JOHNSON, BARBARA L.
University Hospital, Baltimore, Md.

ALUMNI ASSOCIATION SECTION

- JONES, CALVIN E., JR.
South Baltimore General Hospital, Baltimore, Md.
- JUDMAN, ALLEN H.
Sinai Hospital, Baltimore, Md.
- KANDLER, PAUL A.
Naval Hospitals
- KISTLER, GALEN H.
York Hospital, York, Pa. 17403
- LAND, ALLAN S.
Sinai Hospital, Baltimore, Md.
- LANDAU, EARL K.
Los Angeles County Hospital Unit I
- LEGAT, SUSAN
Mercy Hospital, Baltimore, Md.
- LEGAT, WILLIAM E.
Mercy Hospital, Baltimore, Md.
- LEVIN, SANFORD L.
Sinai Hospital, Baltimore, Md.
- LEWIS, FRANK R., JR.
San Francisco Hospital, San Francisco, Calif.
- MARGOLIS, JAY S.
Maryland General Hospital, Baltimore, Md.
- MAUN, JOHN W.
Maryland General Hospital, Baltimore, Md.
- MUELLER, JOHN G.
University of Oklahoma Hospitals, Oklahoma City, Okla. 73104
- OLSEN, LOUIS O.
Maryland General Hospital, Baltimore, Md.
- OLSON, JANNE R.
York Hospital, York, Pa.
- PELCZAR, MICHAEL E.
St. Agnes Hospital, Baltimore, Md.
- PETERS, GEORGE
Los Angeles County Hospital Unit I, Los Angeles, Calif.
- POILEY, JEFFREY E.
Jackson Memorial Hospital, Miami, Fla. 33136
- REILLY, MICHAEL J.
Pittsfield Affiliation Hospital, Pittsfield, Mass. 01201
- ROANE, DONALD C.
South Baltimore General Hospital, Baltimore, Md.
- ROBINSON, E. ANN
University Hospital, Baltimore, Md.
- ROSENSTEIN, ALFRED B.
University Hospital, Baltimore, Md.
- SAIONTZ, HENRY A.
University Hospital, Baltimore, Md.
- SATTENSPIEL, SIGMUND
Cook County Hospital, Chicago, Ill. 60612
- SCHOEN, ALLAN E.
Baltimore Medical Center
- SCHWARTZ, MARTIN S.
Mount Zion Hospital, San Francisco, Calif. 94115
- SEGAL, HANNAH J.
Strong Memorial Hospital, Rochester, N. Y. 14620
- SHOPE, EARL S.
Conemaugh Valley Memorial Hospital, Johnstown, Pa. 15905
- SIGNOR, WILLIAM E., III
St. Agnes Hospital, Baltimore, Md.
- SJOLUND, GEORGE C., JR.
Church Home and Hospital, Baltimore, Md. 21231
- SNYDER, LARRY A.
Sinai Hospital, Baltimore, Md.
- STASIOWSKI, MITSIE P.
St. Agnes Hospital, Baltimore, Md.
- STEFFY, JOHN M.
Maryland General Hospital, Baltimore, Md.
- STEIN, HARRY C.
Washington Hospital, Washington, D. C. 20010
- STEINBERG, LOUIS E.
Good Samaritan Hospital, Corvallis, Ore. 97330
- SUGAR, FRED N.
University Hospital, Baltimore, Md.
- TABOR, HARRY D.
Sinai Hospital, Baltimore, Md.
- TOKAR, ELLIOT S.
Sinai Hospital, Baltimore, Md.
- TOSKES, PHILLIP P.
University Hospital, Baltimore, Md.
- VIRGILIO, RICHARD W.
Naval Hospitals
- WEINSTOCK, JOSEPH S.
Sinai Hospital, Baltimore, Md.
- WHELAN, PHILIP J.
St. Agnes Hospital, Baltimore, Md.
- WHITE, DANIEL H.
Naval Hospitals
- WHITELOCK, VICTORIA P.
Public Health Service
- WHITLOCK, ROBERT N.
Union Memorial Hospital, Baltimore, Md.
- WIMMER, WILLIAM C.
University Hospital, Baltimore, Md.
- WINGFIELD, THOMAS W.
Duval Medical Center, Jacksonville, Fla. 32206

WHERE DID THEY GO?

ELSEWHERE in this issue are published the names of the graduating Class of 1965. In this changing world of medicine, some physicians believe that students are assuming a scientific career at the expense of practical training. The following figures speak for themselves and note that a large percentage of the graduating class are entering internships with a distinctly clinical orientation.

Out of a class of 90, the following distribution is noted:

University Hospital of Baltimore	18
Other University Hospitals	5
Local community, church and non-profit hospitals	53
United States Government	1
County hospitals	9
Military internships	4

Of the members of the graduating class who will intern in this City of Baltimore, the following is the distribution:

Maryland General Hospital	5
Baltimore City Hospitals	1
University Hospital	18
South Baltimore General Hospital	6
Sinai Hospital of Baltimore	12

Union Memorial Hospital	3
Mercy Hospital	6
Greater Baltimore Medical Center (Formerly Woman's Hospital)	2
St. Agnes Hospital	6
Church Home and Infirmary	1

Doctors Goldstein and Triplett Honored

At the annual meeting of the General Alumni Association of the University of Maryland held at College Park on May 15, 1965, Doctors Albert E. Goldstein of the Class of 1912 and William H. Triplett of the Class of 1911 were honored with the receipt of the Abram Z. Gottwals Memorial Award.

This award, presented annually to Maryland Alumni for distinguished service to the Alumni Association, was presented by Erna R. Chapman, President of the Alumni Association. Dr. Triplett serves as Executive Secretary for the Medical Alumni Association. Dr. Albert E. Goldstein has for a number of years served as Chairman of the Greater University of Maryland Fund and has been continually active in behalf of the interests of the School of Medicine.

Class

NOTES

ELSEWHERE in this edition you will find a "tear out" page, for reporting *Alumni News* to the BULLETIN. This is not an idle gesture.

Your achievements, fellow alumnus, are of interest to your classmates. They constitute a reward to the faculty, are a challenge to the younger physicians, and are an item of prestige for the University. Please cooperate with us by forwarding news of yourself or any alumnus to the BULLETIN. Thank you.

Class of 1903

Among the more active of the retired group of Senior Alumni is **Dr. James Leland Anderson** of 213 Butler Avenue, Greenville, South Carolina. Dr. Anderson, who retired from active practice in 1960, recounts many of his past experiences.

As an alumnus of Davidson College, he majored in chemistry following which he taught school for a year, graduating from the University of Maryland in 1905. Following this he served as a resident and clinical assistant and was appointed assistant pathologist at the University Hospital in 1906. Later, he was transferred to the Medical Service and in 1909 returned to his home because of the illness of his father, a practitioner in Reedville, South Carolina.

After many years of active practice including a period of military duty and a long tenure on the Staff of the Greenville General Hospital and St. Francis Hospital, Dr. Anderson's practice has been assumed by his son, Dr. James L. Anderson, Jr., an alumnus of Emory University School of Medicine.

Class of 1911

Dr. Louis A. Buie, Sr., of the Mayo Clinic, Rochester, Minnesota, writes to Dr. William H. Triplett: "I have received your Alumni Certification of Appreciation and the life membership card, and for both I am deeply grateful. Your assurance that the BULLETIN will be sent to me regularly pleases me very much and I will find pleasure in utilizing it to keep abreast of happenings at the University, where my interests have been centered ever since I registered as a medical student in 1911."

Dr. Charles R. Law of Berlin, Maryland, operates the Berlin Nursing Home. The institution, organized in 1958, has a capacity of sixteen beds and enjoys the services of two registered nurses. Dr. Law, who is 79, is also active in the practice of medicine and surgery at the above town.

Class of 1925

Dr. Eva F. Dodge has been named Director of the Maternal and Infant Care Project of the Detroit Health Department. Dr. Dodge assumed her new duties as of December 1, 1964.

Dr. J. Sheldon Eastland has been elected president of the Maryland Blue Shield Plan. Dr. Eastland succeeds Dr. Charles N. Davidson, Baltimore radiologist. Dr. Eastland has been a member of the Blue Shield Board since 1958 and is a member of the Medical Relations, Executive and Joint Blue Cross—Blue Shield Public Relations Committees, for the State of Maryland.

Dr. Henry Oshrin has announced the relocation of his offices to 5800 Broadway in West New York, New Jersey.

Class of 1928

Dr. Hyman S. Rubinstein has announced the removal of his offices for the practice of neuropsychiatry and psychoanalysis to 3900 North Charles Street, Baltimore, Maryland.

Class of 1938

Dr. Wilbur S. Brooks has been recently named Chief of the Department of Radiology at the United States Veterans Administration Hospital, Syracuse, New York.

Class of 1939

Dr. Thomas S. Sexton, vice president and chief medical director of the Massachusetts Mutual Life Insurance Co., was elected to the company's board of directors at the annual meeting held in April in Springfield, Mass.

A native of Sisterville, W. Va., Dr. Sexton is a graduate of West Virginia University and the University of Maryland where he received his medical degree and certificate of honor. He interned at Mercy Hospital in Baltimore.

Dr. Sexton held a fellowship in internal medicine at the Mayo Foundation for Medical Education and Research in 1941, and again between 1945 and 1947, following World War II service in Europe as a flight surgeon in the Army Air Force Medical Corps. He joined the Massachusetts Mutual's medical staff in 1947 and was appointed assistant medical director that same year. He became associate medical director in 1951, medical director in 1956 and vice president in charge of the new business division in 1959. Two years later he was elected vice president and chief medical director.

He currently serves as vice chairman of the executive committees of the Medical Information Bureau and the Springfield Area Community Health Study. He also represents the medical section of the American Life Convention as a medical directors' representative to the Life Insurance Medical Research Fund. His membership in professional organizations includes the Association of Life Insurance Medical Directors of America, the Home

Office Life Underwriters Association and Insurance Medical Group of New England.

Dr. Max S. Sadove, professor and head of the department of anesthesiology at the University of Illinois College of Medicine in Chicago, has been named a member of the special medical advisory group to the Veterans Administration.

Class of 1941

Dr. Raymond K. Thompson has been named president of the Neurosurgical Society of America for the 1964-65 year.

Class of 1942

Dr. J. Howard Franz has announced the dissolution of his partnership with Dr. William E. Peterson. Dr. Franz will continue his offices for the practice of radiology at 2938 St. Paul Street in Baltimore. Dr. Franz serves as president of the Medical Alumni Association for the year 1964-65.

Class of 1943

Dr. Dan F. Keeney of 1028 Connecticut Avenue, N. W., Washington, D. C., was recently elected to active membership in the American Psychoanalytic Association. Dr. Keeney is currently engaged in the private practice of psychiatry and psychoanalysis. He also serves as a member of the District of Columbia Mental Health Commission and is a psychiatric consultant for the United States Civil Service Commission.

Class of 1944

Dr. Abraham M. Lilienfeld, Professor of Chronic Diseases in the School of Hygiene and Public Health, Johns Hopkins University, recently served as principal speaker at an open membership meeting of the Maryland Kidney Founda-

tion. Dr. Lilienfeld is Staff Director for the President's special commission on heart disease, cancer and strokes. Dr. Lilienfeld also discussed the President's report on chronic illnesses and the recommended multi-billion dollar federal health programs of research and service.

Dr. William H. Mosberg has been named president of the Maryland Chapter of the American College of Surgeons for the year 1964-65.

Class of 1945

Dr. Leonard T. Kurland, who has served for a number of years as chief of the epidemiology branch of the National Institute of Neurological Diseases and Blindness, has been named head of the biometry and medical statistics section of the Mayo Clinic, Rochester, Minn.

Class of 1947

Dr. Joseph W. Blevins has been appointed to the newly created position of medical director at the Olin Mathieson Chemical Companies Aluminum Plant in Hannibal, Ohio. This appointment was announced by Dr. Mac Roy Gasque, corporate medical director of Olin. Dr. Blevins will be responsible for developing and implementing an industrial medical service for this plant.

For the past 14 years, Dr. Blevins has been associated with the General Electric Company.

During the Korean conflict, he served in the Chemical Corps of the U. S. Army where he taught medical aspects of chemical, biological, and radiological warfare. Dr. Blevins received his undergraduate education at Geneva College.

Class of 1948

Lt. Col. David Auld, USAF, MC, Deputy Director of the Armed Forces Institute of Pathology for the past two

years, has been transferred to the office of the Surgeon General, USAF, effective 1 August 1965. Col. Auld recently toured the Far East as a consultant in pathology to the Surgeon General of the United States Air Force.

Class of 1950

Dr. Thomas F. Lewis has announced the removal of his office to 500 Greene Street, Cumberland, Maryland. Dr. Lewis is engaged in the practice of general surgery.

Class of 1953

Dr. Israel H. Weiner has announced the association of Dr. G. Lee Russo in the practice of neurological surgery with offices located at 1010 St. Paul Street in Baltimore.

Dr. Edward Spudis has been recently certified by the American Board of Neurology in the specialty of neurology. Dr. Spudis practices in Winston Salem, N. C.

Class of 1954

Dr. Stanford A. Lavine of 1835 Eye Street, N.W., in Washington, D. C., has been recently certified by the American Board of Orthopaedic Surgery.

Dr. Riva Novy, who was recently certified in psychiatry by the American Board of Psychiatry, has been elected to a membership in the American Psychoanalytic Society.

Class of 1955

Dr. William Dvorine of 607 Kahn Drive, Pikesville, Md., has been elected president of the Maryland Dermatologic Society for the year 1965.

Dr. Joseph F. Nataro has been certified by the American Board of Pathology and is currently serving as Chief of the

Laboratory Services at the U. S. Naval Hospital, Corpus Christi, Texas.

Class of 1956

Dr. Edward D. Frohlich, a member of the staff of the Research Division, Cleveland Clinic, Cleveland, Ohio, has been certified in Internal Medicine by the American Board. Dr. Frohlich was recently elected to the Central Society for Clinical Research and has been named a member of the Medical Advisory Board of the Council on Circulation of the American Heart Association. Dr. Frohlich was recently the recipient of an Honors Achievement Award from the Angiology Research Foundation.

Class of 1957

Dr. Marvin Shield Arons has announced the opening of his office for the practice of plastic and maxillofacial surgery, reconstructive and hand surgery at 513 Doctors Building, 2 Church Street, South, New Haven, Connecticut.

Dr. Paul Bormel has recently opened his office for the private practice of urology at 2 East Read Street in Baltimore, Md. For the past two years, Dr. Bormel has served with the U. S. Army in France. During that time he served as chief of urology for the 34th General Army Hospital and was consultant urologist for the U. S. Army in France. Dr. Bormel is the author of several recent papers concerning urological problems. He recently spoke before medical meetings in Garmish and Wiesbaden in Germany.

Class of 1958

Dr. Charles E. Parker has advised us of his new address to Second Field Hospital APO 407, New York, N. Y.

Class of 1959

Dr. G. Lee Russo, who recently completed his residency in neurologic surgery at the University of Maryland, has announced the opening of his office for the practice of neurological surgery in association with Dr. Israel H. Weiner with offices at 1010 St. Paul Street in Baltimore.

Class of 1960

Dr. I. William Grossman has been nominated to the Directorate of Medical Research, Chemical Research and Development Laboratories at Edgewood Arsenal, Maryland.

Dr. Arthur M. Smith, having completed his internship and first year residency in the Department of Surgery of the New York Hospital, Cornell Medical Center, has entered the United States Navy as a Medical Officer, serving aboard the USS RANDOLPH (CVS-15). Dr. Smith's address will be USS RANDOLPH (CVS-15), c/o Fleet Post Office, New York, New York.

Class of 1961

Dr. Robert A. Fink is the co-author of a paper entitled "Rapid Brain Scanning With Technetium—99m." Dr. Fink is presently engaged in a neurosurgical residency at the University of Chicago Hospitals and Clinic.

Dr. Roger Lee Mehl, surgical resident at the Presbyterian-St. Luke's Hospital in Chicago, recently received the Robertson Traveling Fellowship Award, for study during a year's time at Hammersmith Hospital in London, England. Upon his return to Chicago, Dr. Mehl will serve as senior surgical resident.

Dr. John R. Marsh will continue his residency training in general surgery at the University of Iowa Hospital, Iowa City, Iowa, beginning July 1, 1965.

Deaths

Class of 1901 P & S

Dr. Lewis Berlin of 7331 Shirland Avenue, Norfolk, Virginia, died March 18, 1965.

Class of 1905 P & S

Dr. William R. Hanrahan of 127 Farmington Avenue, Farmington, Connecticut, died on January 24, 1965.

Class of 1906 B.M.C.

Dr. John Francis Quinn died April 10, 1965, in the St. Vincent's Hospital, Bridgeport, Connecticut. Death was due to a cerebral thrombosis.

Dr. Quinn had been on the Staff of the St. Vincent's Hospital for many years serving as its Chief of Ophthalmology. He also had numerous executive positions on the Staff and enjoyed a fine practice.

Class of 1907 P & S

Dr. Desausser G. Preston of Lewisburg, West Virginia, died January 9, 1965. Dr. Preston was 86.

Class of 1911

Dr. Abraham Hornstein of 204 East Biddle Street in Baltimore died recently.

Dr. Howard Kemp of Route 1, Shelburne, Massachusetts, died March 9, 1965, at the age of 78.

Class of 1912 P & S P & S 1912

Dr. Joseph Sherman Craig (Medical Corps. United States Army Retired) of Summersville, West Virginia, died on March 31, 1965.

Class of 1916

Dr. Frank C. Marino, a prominent general surgeon, died on April 17, 1965, at the Bon Secours Hospital. Dr. Marino was 70.

A native of Italy, Dr. Marino came to Baltimore at an early age. He was an honor graduate of the School of Medicine and served an internship at the University Hospital following which he joined the Army of the United States serving in France during World War I. At the conclusion of hostilities he entered private practice and served for a time as superintendent of the St. Joseph's Hospital. Dr. Marino received numerous honors among which was one presented in 1954 by the Italian Government on behalf of his efforts concerning the homeless children in post-war Italy. He was active in civic and political affairs serving for a time as president of the Baltimore City Park Board. Dr. Marino was the recipient of numerous honorary degrees receiving a Doctor of Laws Degree from the College of Notre Dame of Maryland, Doctor of Science Degree from Dickinson College, Carlisle, Pennsylvania, and a Doctor of Letters from Western Maryland College in 1957. He was the donor of a permanent scholarship at the University of Maryland for graduate education in nursing.

Dr. J. F. Gonzales of Hato Ray, Puerto Rico, died recently.

Class of 1918

Dr. John Jacob Giesen of Radford, Virginia, died on May 16, 1965, at the Radford Community Hospital. Dr. Giesen, who was 73, had practiced in Radford for more than forty-six years.

A graduate of Roanoke College and of the School of Medicine, he served as an intern in the Maryland General Hospital

in Baltimore. He was charter member, founder and trustee of the Radford (Virginia) Community Hospital and served as president of its board of trustees and also of the medical staff. He was a veteran of World War I and a past commander of American Legion Post Number 30.

Class of 1922

Dr. Louis Noll of 1383 Clinton Avenue, Irvington, New Jersey, died on March 3, 1965. Dr. Noll was 70.

Class of 1925

Dr. George F. Leibensperger of 24 East Main Street, Kutztown, Pennsylvania, died March 3, 1965.

Class of 1930

Dr. Samuel Zeiger of Bronx, New York, died recently.

Class of 1931

Dr. Kenneth Lee Cloninger of Newton, North Carolina, died as the result of injuries received in an auto accident on January 20, 1965. Dr. Cloninger was 59.

Class of 1938

Dr. Clarence L. Miller of 1601 16th Street, N. W., Washington, D. C., died on January 29, 1965. Dr. Miller was 58.

Class of 1942

Dr. Richard A. Carey, a member of the research staff of the Ayerst Laboratories, died at the North Shore Hospital in Manhasset, L. I., on December 12, 1964, after a short illness. Death was due to coronary occlusion.

A native of Baltimore and a graduate of Loyola High School, Dr. Carey completed his undergraduate work at Loyola College in Baltimore in 1938. He received his medical degree in 1942 and after a year internship at the University Hospital served in the U. S. Navy until 1946.

Following a two-year residency in internal medicine at Mercy Hospital, he served for two years as a fellow in endocrinology. He then entered industrial research, being associated with Armour and Company and the American Cyanamid Company. Dr. Carey was associate medical director for the Ayerst Laboratories, having been with this company since 1956. He is survived by Dr. T. Nelson Carey of the School of Medicine Faculty and three sisters, his wife, the former Teresa Petrlik, two sons, Richard N. and John D. Carey, and a daughter, Miss Teresa A. Carey.

Class of 1943 (March)

Dr. Thomas B. Dunne of Walson Army Hospital, Fort Dix, New Jersey, died August 19, 1964.

ALUMNI NEWS REPORT

TO THE BULLETIN:

I would like to report the following:

SUGGESTIONS FOR NEWS ITEMS

American Board Certification
Change of Address
Change of Office
Residency Appointment
Research Completed
News of Another Alumnus
Academic Appointment
Interesting Historic Photographs

Name _____

Address _____

Class _____

Send to

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University of Maryland
31 S. Greene St.
Baltimore 1, Md.

BULLETIN *School of Medicine* *University of Maryland*

VOLUME 50

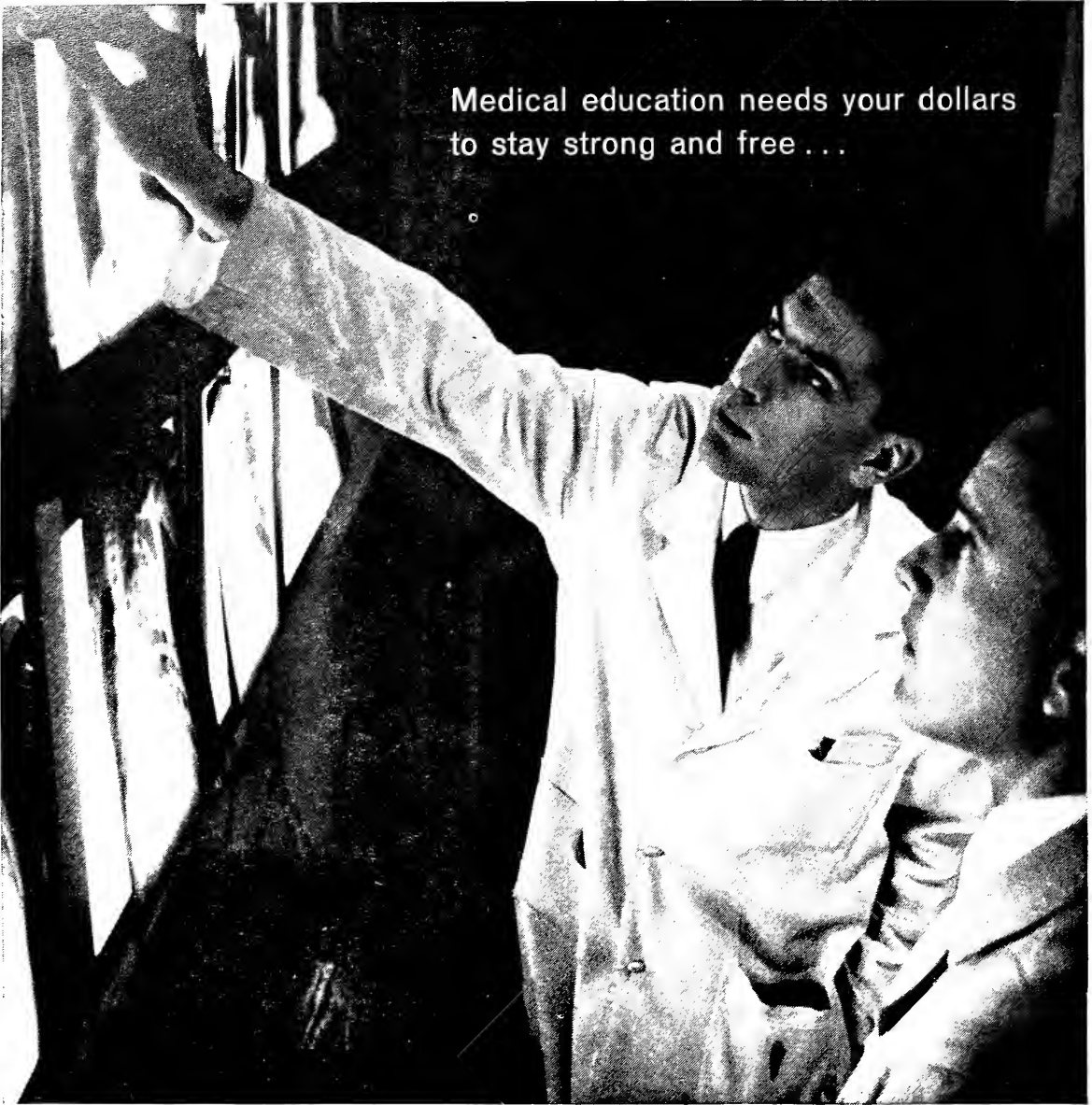
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October, 1965



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BULLETIN *School of Medicine* *University of Maryland*

VOLUME 50

OCTOBER, 1965

NUMBER 4

Editorial

In Defense of the Case

CERTAIN PHYSICIANS, some of them in academic positions, when advising others have frequently downgraded the publication of clinical studies, commonly known as case reports. The younger clinician has been encouraged to devise some type of experimental program, the case study being presented to him as too elementary and of little importance. Consequently, some have concluded that the case report is outmoded and useless. Nothing could be farther from the truth.

The history of medicine indicates a steady and consistent change in the aspects of disease. Clinical medicine and surgery are far from the utopia of complete understanding. Indeed, numerous conditions are poorly documented and incompletely understood, particularly as regards their clinicopathologic aspects. Numerous familiar conditions are literally nothing but syndromes. Many diseases found in man do not exist in animals and cannot be reproduced in them. Therefore, if knowledge of human disease is to expand, it must

expand through the patient addition of bits of clinical and pathologic information, however small.

The accumulation of such data, often after many years of patient effort, affords the scholar the opportunity to compile, assay and possibly through a model experiment to answer certain important questions. From these observations come naturally a more thorough understanding of the nature of disease as well as rational therapy and methods of prevention. Thus, without these simple observations, patiently recorded, a complete understanding of disease cannot become possible.

There are many medical and surgical disorders so poorly understood that less than 200 reported cases are on record. Valid conclusions can hardly be drawn on the basis of such fragmentary knowledge. When unusual clinical or pathological conditions present themselves, it is important that they be properly and permanently recorded and indexed. To this end the case report still remains and should continue

to be an important type of publication and a valued method of cumulative clinical research. A rough guide as to the importance of any projected case report can be achieved through the following criteria. The case should be recorded:

1. If there are less than 300 reported incidences in the literature.
2. If a new clinical sign has been observed.
3. If a new aspect of the disease has been observed clinically or pathologically.
4. If some new aspect of therapy has been developed.

The case report, if properly prepared, serves not only to add important observations to existing scientific literature, but as well may serve as a brief review of a relatively obscure or poorly understood condition. The history of medicine has been characterized not only by spectacular and revolutionary discovery but also by the patient accumulation of fact to be ultimately enlarged upon, tested and exploited for the benefit of mankind. The clinical study and case report, therefore, should receive the proper recognition and encouragement it deserves.

J.A.W.

Prolonged Human Gestation at University Hospital

ARTHUR L. HASKINS, M.D., and WERNER SCHALLENBERG, M.D.

IN DELIVERING THE Joseph Price oration at the Annual Meeting of the American Association of Obstetricians and Gynecologists in September 1962, J. C. McClure Browne¹ presented material collected in England and Wales concerning the effect of postmaturity on the human fetus. This was a stimulating presentation which, in addition to emphasizing the risk of prolonged gestation on the survival of the human fetus, accentuated the dichotomy between the English and American opinions concerning the hazards of postmaturity.

The correlated data indicated a sharp rise in perinatal mortality in pregnancies continuing past 42 weeks. The perinatal mortality doubled at 43 weeks, tripled at 44 weeks and continued to rise through 45 weeks of gestation. The incidence of fetal distress in the postmature infant was significantly increased. Factors which further influenced the fetal mortality and morbidity unfavorably included primiparity, increase in maternal age and toxemia of pregnancy. Browne concluded that though the risk of interference in prolonged pregnancy must be carefully considered, timely intervention under proper circumstances could save the lives of many potentially healthy babies by removing them from an environment no longer favorable to their well being.

In sharp contrast to the data and conclusions of Browne, Evans *et al.*² presented material collected at Ann Arbor, Michigan. In this data there was no significant difference in perinatal death rates between the normal and prolonged gestational infants. They concluded that em-

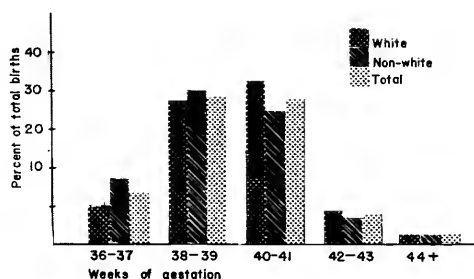


Fig. 1. Distribution of births relative to duration of gestation.

phasis on the postmature fetus has been overdone. The current status and historical aspects of the postmaturity problem are well summarized in a recent review by Cushner.³

In view of the conflicting data and regional opinions expressed by Evans *et al.* and Browne, a study was undertaken at University Hospital for the purpose of determining our experience with the fetal outcome in prolonged gestation.

The clinical material subjected to postmaturity analysis consisted of the total births occurring between 1953 and 1962 at University Hospital. In the data to be presented on fetal distress, only those births occurring between 1960 and 1962 were utilized. The remainder of the data was obtained from the total births between 1953 and 1960. The total sample in the latter group was 21,119 pregnancies, while the former group included only 5,016 pregnancies.

The distribution of total births relative to the duration of gestation is depicted in Figure 1. As indicated, this shows only the total births from 36 weeks to 44 weeks-plus gestation. The data is plotted at 2-week intervals. The racial distribution of the total sample was approximately equal between the non-white and white population. The greatest incidence of white births were found in the 40-41-week group,

From the Department of Obstetrics and Gynecology, University of Maryland School of Medicine, Baltimore, Maryland 21201.

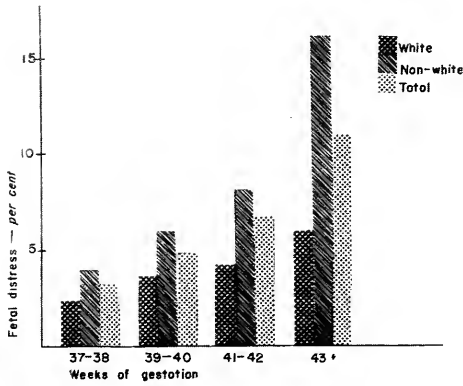


Fig. 2. Incidence of fetal distress relative to duration of gestation.

while the greatest incidence of non-white births were found in the 38-39-week group. As a result of this racial difference, 38.5% of all births occurred in the 38-39-week and 38.4% occurred in the 40-41-week group. Ten per cent of the total births were 42 weeks and longer. The 44-weeks and longer group included 2% of the total births. The incidence of post-maturity in our data at the 42 weeks-plus level of 10% compares favorably to Browne's data of 41 weeks-plus at 12.4%. These figures approximate the data of Evans *et al.* in which 8.8% of the reported mothers delivered more than 2 weeks after the expected date of confinement.

Fetal distress relative to the duration of pregnancy is shown in Figure 2. Fetal distress was defined as irregularity of the fetal heart beat or a fetal heart rate of less than 100 or over 160 per minute. Meconium in the amniotic fluid in a vertex presentation was also considered an indication of fetal distress. This is an analysis of 5,016 births with a duration of gestation of 37 or more weeks. The racial distribution in this sample is 68% non-white and 32% white. Fetal distress became increasingly apparent as the duration of gestation was prolonged. Twelve per cent of the babies in the 43 weeks and over group showed some evidence of fetal distress. Six per cent of the babies showed fetal

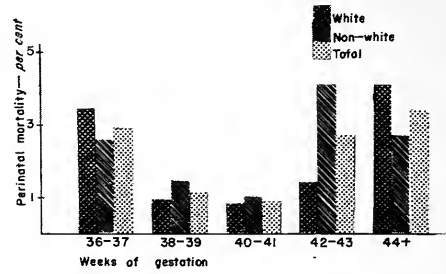


Fig. 3. The incidence of perinatal mortality relative to duration of gestation.

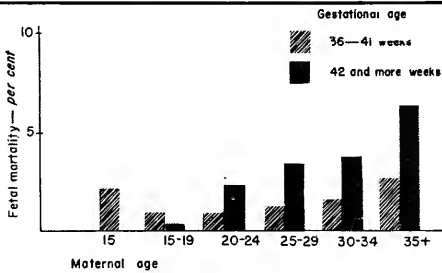
distress in the 37-42-week gestational group.

Perinatal mortality relative to the duration of gestation is shown in Figure 3. There were 311 perinatal deaths occurring in the 21,219 births with a duration of pregnancy of 36 weeks and greater. The overall perinatal mortality in this group of births was 1.46%. The lowest fetal mortality was in the 40-41-week group and was 0.9%. There was, however, little difference between this group and the 38-39-week group. The greatest perinatal mortality was observed in the infants born of mothers whose period of gestation was 44 weeks or over. This was 3.4%, a figure almost four times greater than that of the mortality at 40-41 weeks.

It has been suggested that with an increasing length of gestation there is a concomitant increase in fetal size. Further, that this increase in fetal size could account for at least some of the problems associated with fetal wastage in the postmature infant. In Table 1 the birth weights of all infants of gestational age of 36 weeks and greater are indicated in percentile form. There is a general trend toward increasing birth weight as the period of gestation increases. In the 36-37-week group, 13.5% of the infants weighed 3,500 Gm. or over; in the 38-39-week group, 22.7%; in the 40-41-week group, 35.6% and in the 42-week-plus gestational age, 38.1% weighed more than 3,500 Gm. There are exceptions to this general trend indicating that this

Table I. Birth Weight Frequency Relative to Duration of Gestation

Birth Weight in Grams	Duration of Gestation in Weeks			
	36-37	37-39	40-41	42+
400-999	0.03%	0.01%	0.01%	0
1000-1499	0.6	0.1	0.1	0.1
1500-1999	2.6	0.8	0.2	0.4
200-2499	13.0	5.8	3.1	2.9
2500-2999	36.9	28.7	19.6	18.9
3000-3499	33.2	42.0	41.1	39.5
3500-3999	11.3	19.3	29.3	26.7
4000-4499	1.8	3.1	7.1	9.3
4500-4999	0.3	0.5	1.0	1.8
5000+	0.1	0.04	0.2	0.3

**Fig. 4. Perinatal mortality relative to maternal age and duration of gestation.**

is not a constant occurrence. Indeed some infants may be less than average in their birth weight despite a prolonged gestational age.

The final positive correlation involved postmaturity, perinatal mortality and maternal age. A comparison was made, Figure 4, between maternal age and perinatal mortality in those infants that were birthed at 36-41 weeks of gestation and those whose gestational age was 42 weeks and longer. There is a general trend toward increasing perinatal mortality with increasing maternal age. The greatest perinatal mortality was recorded at 35 years and over. This general trend is further

accentuated by the presence of postmaturity of 42 weeks and more. These data indicate that the fetus in the older parturient is at greater risk in a prolonged gestation than is the fetus of the younger woman. There is increased risk to the postmature infant in all age groups.

Summary

Perinatal mortality and fetal distress in those infants with a gestational age of 36 weeks or over at University Hospital from 1953 to 1962 was reviewed. An analysis of 26,125 pregnancies was made. Ten per cent of the total births in this group were of 42 weeks and longer.

The prolongation of gestation beyond 44 weeks increased the perinatal mortality to 3.4% as compared to the optimal mortality rate of 0.5% at 40-41 weeks of gestation. Perinatal mortality was also influenced by maternal age with an increase in mortality rate with increasing maternal age. The perinatal mortality for each age group was further increased in gestations of 42 weeks and more. Fetal weights increased with the prolongation of gestation with 13.5% of fetuses weighing more than 3,500 Gm. at 36-37 weeks of gestation to 38.1% of fetuses weighing greater than 3,500 Gm. at 42 or more weeks of gestation. The incidence of fetal distress increased significantly with prolongation of pregnancy beyond 40 weeks.

The data presented in this study corroborate the findings of Browne in his analysis of postmaturity in England and is at variance with the data of Evans *et al.* collected in the State of Michigan.

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Effects of Hyperbaric Oxygenation on Protein Electropherograms of Different Organs of Shocked Rats*

SETSU KOMATSU, EDMUND JENKINS** AND MORITZ MICHAELIS ***

THE PURPOSE of this study is to investigate first, whether the protein electropherograms of some organs of the rat are altered in shock; and, second, since shocked rats exposed to hyperbaric oxygen (OHP) have a better chance to survive,¹ to investigate the electropherograms of organ extracts obtained from shocked animals exposed to OHP.

Changes in electropherograms of plasma in many diseases are well known and are increasingly being used in clinical chemistry. The assumption which underlies the study of electropherograms of plasma is that in some diseases proteins of the affected organs are being released into the bloodstream, to become detectable in the plasma. The correlate experiment, namely, testing the protein electropherograms of different organs in shock, has not yet been described. Such tests should indicate the severity of damage to different organs in shock.

These experiments describe protein electropherograms of extracts obtained from brain, heart, muscle (quadriceps), kidney, liver and plasma of rats, shocked and kept in air, and shocked with follow-

ing exposure to OHP, as compared with controls.

Materials and Methods

Non-fasted young adult male Wistar rats, weighing 190-250 grams, were used. Shock was induced by the method of Noble and Collip². Each animal received 640 turns of the drum, while its paws were fettered. The animals were then unfettered and either left in cages, breathing room air, or they were treated with OHP as described,¹ in a cylindrical chamber 65 cm. long, inner diameter 20 cm. Exposure was for two hours at three atmospheres. All shocked animals were decapitated 2½ hours past drumming.

Blood was collected in heparinized tubes. Brain, heart, liver, kidney and quadriceps muscle were quickly dissected out, freed from adhering blood, and finely chopped under ice cooling, then transferred to Potter-Elvehjem homogenizers of 10 ml. capacity fitted with teflon pestles (Arthur H. Thomas Co., Philadelphia). The clearance between pestle and glass wall was 0.013 to 0.018 cm. Tris-barbiturate buffer, pH 8.9, ionic strength 0.05 M was added in the amounts of 1.5 ml. to 1.5 Gm. of brain; 2.0 ml. to 0.7 Gm. of heart; 3.0 ml. to 1.0 Gm. of liver; 3.0 ml. to 1.0 Gm. of kidney; and 2.0 ml. to 1.0 Gm. of muscle. The tissues were rapidly homogenized under ice cooling. The homogenates were spun in the Spinco preparative ultracentrifuge for 40 minutes at

From the Department of Surgery, University of Maryland School of Medicine, Baltimore, Maryland.

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** Baltimore City Health Department.

*** Present address: Ophthalmology Research Laboratory, University of Maryland School of Medicine, Baltimore, Maryland.

127,000 Gm. Plasma was separated by spinning the heparinized blood in a clinical centrifuge for 10 minutes. The same procedures were used for the tissues of control rats. Samples of the tissue extracts and of undiluted plasma were subjected to electrophoresis on 2.54 cm. x 17.15 cm. strips of cellulose polyacetate (Sepraphore III, Gelman Instrument Co., Ann Arbor, Mich.) which had been soaked in the buffer. A current of 300 V and 10 mA was applied for 50 minutes. The strips were stained with a solution of 50 mg. Amido Schwarz 10B in 100 ml. of 10% acetic acid, fixed in acetic acid, dried in air, made transparent in heavy mineral oil and mounted between microscope slides. The dyed zones were numbered beginning with that zone which had migrated farthest

from the origin. Their optical densities were recorded and the area for each zone was integrated with the "Chromoscan" apparatus, using the red filter supplied by the manufacturer (Joyce Loebel Corp., Ltd., Newcastle/Tyne, Great Britain).

Comparisons of the zones were made for each organ extract, the integrated densities for each zone being expressed as percentages of the sum of the densities for each strip. Statistical tests determined the significance of variations ("Student's" test).

Results

Typical electropherograms are shown in Fig. 1a-f, and the results of densitometry are presented as bar graphs in Fig. 2, a & b.

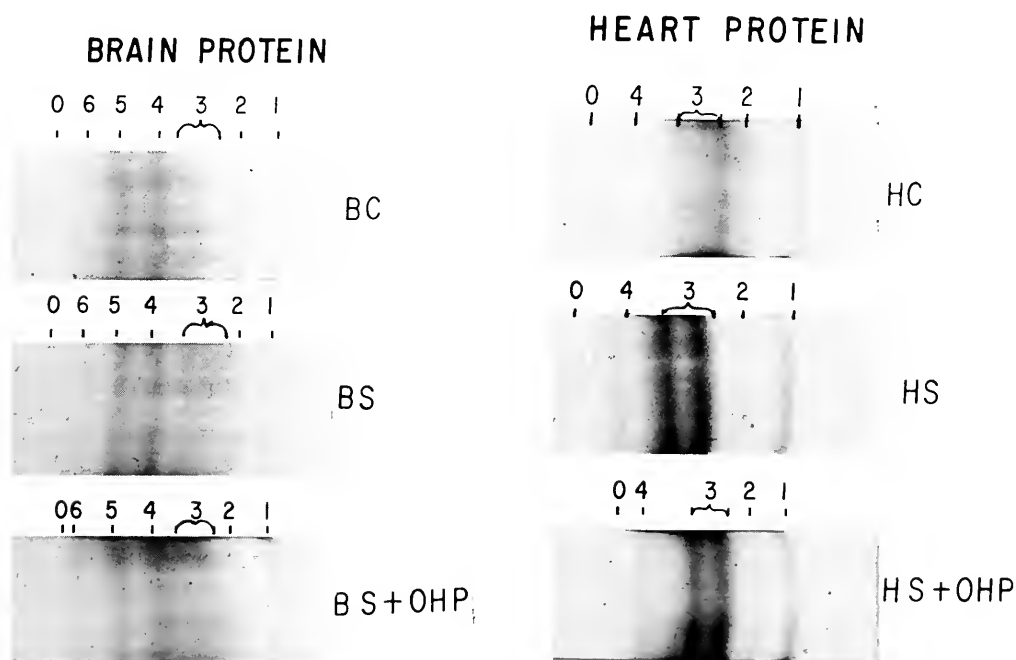


Figure 1a (a & b). Electropherograms obtained from various rat tissues before shock, after shock, and after shock treated by OHP.

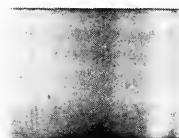
C = control

S = shock

S + OHP = shock treated with OHP

KIDNEY PROTEIN

0 4 3 2 1



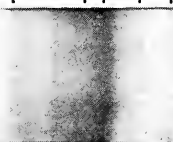
KC

0 4 3 2 1



KS

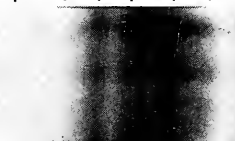
0 4 3 2 1



KS+OHP

LIVER PROTEIN

0 6 5 4 3 2 1



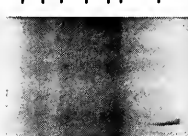
LC

0 6 5 4 3 2 1



LS

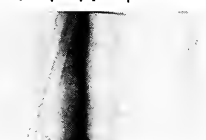
0 6 5 4 3 2 1



LS+OHP

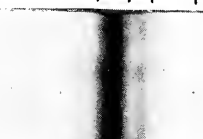
MUSCLE PROTEIN

0 5 4 3 2 1



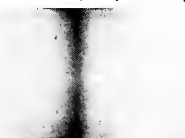
MC

0 5 4 3 2 1



MS

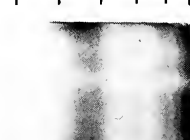
0 5 4 3 2 1



MS+OHP

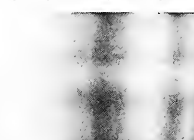
PLASMA PROTEIN

0 4 3 2 1



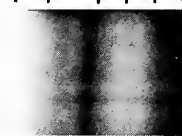
PC

0 4 3 2 1



PS

0 4 3 2 1



PS+OHP

Figure 1b (c, d, e, & f). Electropherograms obtained from various rat tissues before shock, after shock, and after shock treated by OHP.

C = control

S = shock

S + OHP = shock treated with OHP

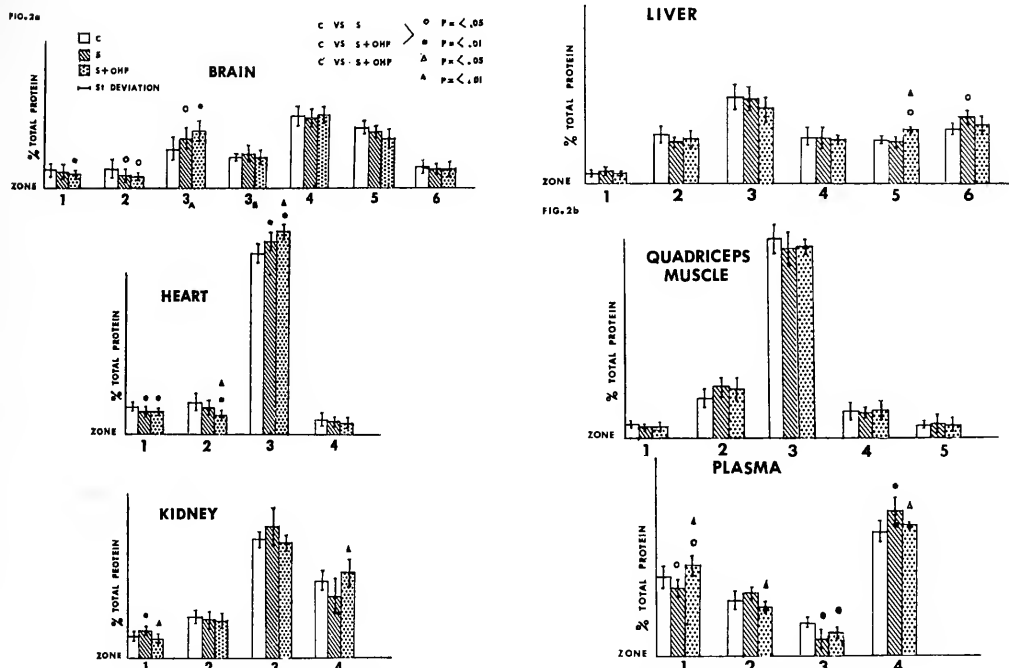


Fig. 2 (a and b). Bar graphs of densitometry in controls, shock and shock plus OHP.

Brain: Comparing controls with shock cases, both being kept in air, a decrease occurs in zone 2, and an increase in zone 3, after shock. When controls are compared with shock treated with OHP, then zone 2 of the shock preparation is decreased. Zone 3 shows, in brain, two closely sub-zones, named 3a and 3b. In shock treated with OHP, zone 3a is greater than control kept in air. Comparison of shock, kept in air, versus shock treated with OHP, shows no differences.

Heart: Control compared with shock, breathing air, shows differences in zone 1, a decrease, and in zone 3, an increase. Comparing controls with shock breathing OHP, decreases are seen in zones 1 and 2, and an increase in zone 3. The changes from shock air, to shock, OHP, lie in the same direction when animals were shocked and left in air. Hence OHP causes a significant difference of zones 2 and 3 in the protein electropherograms of hearts of rats which have been shocked.

Kidney: The electropherograms show differences due to shock. Control versus shock has an increase in zone 1; shock versus shock in OHP has a decrease in this zone. The effect of shock is reversed in zone 1 due to OHP treatment. In zone 4, OHP treatment after shock causes an increase when compared with shock not followed by OHP treatment. Hence, OHP treatment after shock abolishes differences which occur in shock without the treatment.

Liver: A small increase is seen in zone 6 when control and shock without OHP treatment are compared. This difference does not occur when comparing controls with shock, followed by OHP. However, a small difference, namely an increase, appears in zone 5 instead.

Muscle: Extracts did not show any differences, either in shock or in shock followed by OHP.

Plasma: Differences due to shock without OHP treatment are decreases in

zones 1 and 3 and an increase in zone 4. Comparing the controls with shock followed by OHP treatment, an increase occurs in zone 1 and a decrease in zone 3. This is different for zone 1 from the observation made in ordinary shock. Comparing shock without and shock with OHP treatment, the differences are in zone 1, an increase; and in zones 2 and 4, decreases. This points to a reversal of the effect of shock because of subsequent breathing of OHP.

Discussion and Summary

Strawitz and Hift³ were the first to note an increase in the water-soluble protein of dogs' heart in hemorrhage with shock. In this laboratory⁴ decreases in dehydrogenases activity of rat brain homogenates were found in shock. Further, an increased permeability of shocked rats' brain to $^{32}\text{PO}_4$ was found;⁵ however, staining with the Masson trichrome stain as modified by Goldner did not reveal changes in the cellular distribution of protein in shocked rats' brain.

Hrůza and Smetana⁶ described differences in the electropherograms of rat liver proteins in Noble-Collip drum shock. Our results do not agree with theirs, but they used an acetic buffer for protein extraction, whereas our extraction medium was alkaline. This difference in extraction may explain the differences in the results.

In the present study, patterns of electropherograms of organ extracts of shocked rats differ from controls in the brain, heart, liver, kidney, and plasma, but not in quadriceps muscle.

If shock was followed by OHP treatment, which increases survival of shocked rats, then electropherograms of the proteins in the extracts of kidneys and in the plasma are shifted back toward the normal patterns, on the other hand, the proteins in zone 2 and 3 of the heart are changed by shock and OHP treatment causes a further

shift in the same direction.

The significances of these changes cannot be established at this time because it has not been possible to identify the protein fractions which are changed by shock or by shock and OHP treatment. However, the results of this investigation suggest that shock produces changes in the binding of certain proteins to the cell membranes and connective tissue thereby making them more or less extractable. Also, the shock may lead to changes in the aggregation of some of the proteins, thereby leading to changes in their electrophoretic mobility.

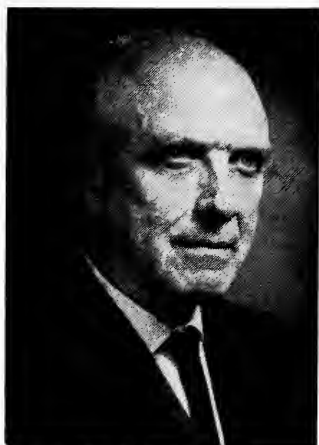
Further studies are necessary before the exact nature of these changes and their significance can be elucidated.

Acknowledgment

The authors wish to express appreciation to Dr. Elwood H. LaBrosse and Dr. S. Hashimoto for advice and assistance in the preparation of this manuscript.

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Dean's LETTER

MEDICAL SCHOOL SECTION

Dear Members of the Alumni, Faculty and Students:

There are many individuals today who blame their failures in achieving goals on society. These individuals have lost sight of the fact that the individual and his efforts are an essential part of achievement. Society can provide the opportunity for an education but the individual must put forth the necessary effort to achieve the education. How far the individual can advance in his education depends to a large degree upon the ability of the individual, his effort to attain the desired goal, as well as the educational programs and teachers made available to him.

If medical schools are to maintain and improve the quality of physicians graduated, the standards of education required for admission to medical school, as well as the standards within the medical education program must be maintained. These standards must apply to all candidates.

The Administration and Faculty of this Medical School attempt to carry out their work based on this philosophy.

DEAN

The Testimonial Day

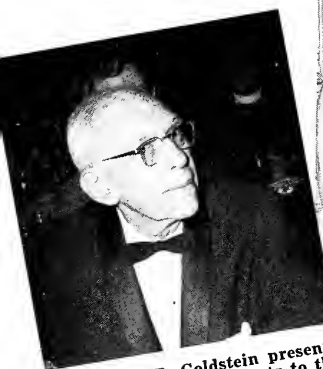
Camera Views taken at the Testimonial Dinner, September 24, 1965, at the Sheraton-Belvedere Hotel, Baltimore.



Dean William S. Stone accepts Dr. Krantz's portrait in behalf of the School of Medicine.



Dr. Louis A. M. Krause served as toastmaster. Left to right: Dr. Krantz, Dr. Krause, and Mrs. Krantz.



Dr. Albert E. Goldstein presents the portrait of Dr. Krantz to the School of Medicine.



Mrs. Claire Krantz Loecher, daughter of Dr. Krantz, unveils the portrait as the artist, Stanislaw Rembski, looks on.



Dr. John C. Bowers, who studied under Dr. Krantz, with members of the Class of 1938, now president of the Josiah Macy Foundation, was one of the speakers.



The Honorable Theodore R. McKeldin, Mayor of Baltimore, presents Dr. Krantz with an honorary citizenship award.

to Dr. John C. Krantz, Jr.

DR. JOHN CHRISTIAN KRANTZ, JR., professor and chairman of the department of pharmacology at the School of Medicine, and for more than 33 years a member of its faculty, retired on September 1, 1965, climaxing a distinguished career as teacher, scientist, investigator, and public spirited citizen.

In commemoration of his long tenure of distinguished service to the School of Medicine and to the field of Pharmacology, his many friends, through a testimonial committee headed by Dr. Edward B. Truitt, organized a testimonial day on September 24, 1965, at which time the School of Medicine was presented an oil portrait of Dr. Krantz, the work of Mr. Stanislav Rembski of Baltimore. Another gift to the University through the Trustees of the Endowment Fund is an annual lectureship in Pharmacology adequately funded through many gifts from friends of Dr. Krantz.

At a dinner held at the Sheraton Belvedere Hotel on the same day, more than 400 physicians and scientists gathered to pay tribute to many achievements and personal virtues of the honored guest.

Following the invocation by The Reverend Dr. J. Calvin Jackson, Minister of Faith Presbyterian Church, speakers included Dr. John Z. Bowers, President of the Josiah Macy Foundation and a member of the Class of 1938. Dr. Chauncey D. Leake, director of Medical Student Research Training Programs of the San Francisco Medical Center, University of California, Dr. J. Carey Taylor, assistant superintendent of Baltimore City Schools (1930-1956), and Dr. C. Jeleff Carr, chief of the Scientific Analysis Branch, Life Sciences Division, Department of the Army and for many years a close associate of Dr. Krantz in the Department of Pharmacology.

The Honorable Theodore McKeldin, a long time personal friend of Dr. Krantz, presented him with an honorary citizenship award, an official recognition of the City

of Baltimore for Dr. Krantz's many contributions, to medical education, science and as a public spirited citizen.

This was followed by the unveiling of the portrait. Dr. John A. Wagner, editor of the *BULLETIN* of the School of Medicine and a member of the testimonial committee, presented the artist, Mr. Stanislav Rembski, and Mrs. Claire Krantz Loecher, daughter of Dr. John C. Krantz, who then unveiled the portrait. Dr. William S. Stone, Dean of the School of Medicine, accepted the portrait in behalf of the medical faculty.

Dr. Louis A. M. Krause, professor of Clinical Medicine, served as Toastmaster.

Following the formalities, Dr. Krantz very graciously accepted the honors which had been bestowed upon him. His remarks follow:

Mr. Toastmaster, distinguished guests, and so many good friends. My heartfelt thanks to you and the committee for arranging this auspicious occasion. I am especially grateful to Dr. Edward B. Truitt, Jr. and his charming wife for their arduous work and untiring energy in the preparations for this banquet. If I had known of the amount of labor and effort my retiring would have imposed upon so many good people, I would have gone right on working.

I feel undeserving of this splendid occasion. There were so many complimentary remarks, I cannot recall so many paid to anyone but Caesar and with him they waited until he was buried. However exaggerated and flattering the comments of the distinguished speakers were, they were very pleasant to hear. They describe more accurately the man I have striven to be rather than the person I am.

Early in life I heeded the message of Chaucer, "And gladly would he learn, and gladly teach." My teaching began in the Sunday School of Faith Presbyterian Church and it was a privilege through an ever-lengthening past to teach more than 3000 medical students. It was a happy life—for the joy of teaching stems from the great success achieved by one's students and one can vicariously glory in their attainments.

Research is a happy life also. E. Emmet Reid

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An Appreciation of

JOHN C. KRANTZ, Jr.



Dr. John C. Krantz, Jr.

THE CAREER of Dr. John C. Krantz, Jr., who retired as professor and head of the Department of Pharmacology, School of Medicine, on September 1, 1965, represents an outstanding example of a highly productive cross-fertilization between the sciences of chemistry, pharmacy, and the medical sciences, particularly pharmacology. Dr. Krantz has served the University for over 40 years as an eminently successful teacher, administrator, and research worker. His activities as a teacher, scientist, and public servant have brought honor and fame to him and the Institution he served so faithfully.

John Christian Krantz, Jr. was born in Baltimore, the son of Dr. John Christian Krantz and Johanna Fredericka (Steinmann) Krantz. For many years the elder Dr. Krantz operated a drug store at Broadway and Chase Street and young John Krantz acquired his first knowledge of drugs and pharmacy while working in his father's apothecary shop. He continued his education at the University of Maryland, earning a Bachelor of Pharmacy degree in 1923, an M.S. one year later, and his Doctor of Philosophy in chemistry in 1928. While still a graduate student young John Krantz's talents and abilities were recognized by the faculty. He was appointed associate professor of chemistry and instructor in physics in the Schools

of Pharmacy and Dentistry. He rose rapidly to become professor of chemistry and pharmacy, retaining these positions until he became director of pharmaceutical and chemical research at Sharp and Dohme, whose laboratories were then located in Baltimore.

In 1930, Dr. Krantz became chief of the bureau of chemistry in the Maryland State Department of Health, a position he retained until 1935. During these years Dr. Krantz's interests shifted from pharmacy and chemistry to the newly-developing science of pharmacology, and he availed himself of the opportunity to broaden his knowledge of this field when he accepted the invitation of Dr. John Jacob Abel, the "Father of American Pharmacology," to work in his laboratories at the Johns Hopkins Medical School. While at Hopkins, Dr. Krantz worked in association with Dr. David I. Macht, one of the foremost American pharmacologists.

The 1920's and 1930's were exciting years for the new science of pharmacology. During these decades striking advances were made in drug therapy which laid the foundation for the therapeutic revolution occasioned by the discovery of the anti-bacterial sulfonamides in the middle 1930's and the antibiotics a few years later. In the early 1920's Banting and Best at Toronto discovered insulin; Abel at Johns Hopkins crystallized this protein and

demonstrated the physiological action of this pure substance; Saxl and Heilig in Vienna discovered the mercurial diuretics; Chen introduced the alkaloid ephedrine into medicine and laid the foundation for the later sympathomimetic amines. Harington and Barger synthesized thyroxin and Schonle at Eli Lilly prepared Amytal and other useful barbiturates. Many vitamins and hormones were isolated and identified. Hexylresorcinol and the organic mercurials were introduced as anti-infective agents. Otto Loewi discovered *Vagusstoff*, later identified as Reid Hunt's acetyl choline, a chemical mediator in the autonomic nervous system. In anesthesia, Luckhardt introduced ethylene and Chauncey Leake discovered divinyl ether; shortly thereafter, Lucas and Henderson introduced cyclopropane as a potent and useful general anesthetic.

It was during these years of rapid transition in scientific medicine that Dr. Krantz began his work as a teacher and research worker in pharmacology. When Dr. William B. Schultz retired as professor of materia medica and pharmacology in 1932, Dr. Krantz was called upon to fill the chair of Pharmacology on a part time basis. Dr. Krantz filled the post so adequately that he was requested to continue to fill the position permanently. This he has done since 1935.

The vigor with which Dr. Krantz has applied his chemical and pharmaceutical talents to the furtherance of pharmacology is reflected in an imposing *Curriculum Vita* of more than 300 scientific publications. In addition, he is the author of several hundred book reviews, popular articles, published speeches, historical publications, etc. The largest group of his scientific papers bears the serial series numbers of "Anesthesia I to LXVIII." This field of research, which is most familiar to anesthesiologists, has resulted

from his application of physical and chemical knowledge and pharmacologic study to the improvement of volatile anesthetics. It has resulted in many successes among some interesting disappointments. In the early days of his anesthetic research, Dr. Krantz and his colleagues prepared and studied a large number of ethers of differing structural types. Some milestones in this chain of investigations have been cyclopropyl methyl ether (Cyprome Ether), cyclopropyl ethyl ether (Cypreth Ether), cyprethylene ether, propethylene ether, trichloroethylene (Trimar), cyclobutane and spiropentane. Drugs which are currently in use in anesthesia arising from these researches are ethyl vinyl ether (Vinamar) and trifluoroethyl vinyl ether (Fluoromar). The suffix *mar* in these names is derived from Maryland, the University where they were discovered.

Some years ago Dr. Krantz and his associates began the exploration of fluorinated organic compounds as possible anesthetic agents. Fluorine, when introduced into an organic molecule, frequently causes striking changes in the physical, chemical, and pharmacological properties of the compound. Thus, boiling point is decreased, vapor pressure is increased, flammability is reduced, surface tension is lowered, and toxicity is frequently diminished. It is easy to see how the application of these properties to anesthetic agents may be of great value (especially increased volatility, diminished toxicity, and reduced flammability). The introduction of fluorine into ethyl vinyl ether led to trifluoroethyl vinyl ether, the first fluorinated volatile anesthetic to be used in man. Thus, Dr. Krantz may be considered the father of the modern era of fluorinated compounds in anesthesia. This concept has completely revolutionized the practice of anesthesia and insures abiding fame to its founder. Today, many fluorinated compounds are



Left to right: Dorothy Kibler, Dr. Krantz, Wm. G. Harne, and Dr. Carr. The first administration of propyl methyl ether (Metopryl)—September 22, 1945.

used in medicine, including fluorinated steroids, phenothiazines and chlorothiazide type drugs. It is standard practice for the medical chemist to introduce fluorine into the molecule of many drugs and observe the changes in potency which follow.

Most interesting among the "disappointments" has been hexafluorodiethyl ether (Indoklon) which, paradoxically, is not an anesthetic, but a convulsant. In applying the principles regarding fluorine enumerated in the previous paragraph, Dr. Krantz and his associates prepared hexafluorodiethyl ether, on the assumption that it would be a more volatile and less flammable anesthetic agent than ether. When Dr. Krantz first sprinkled a few drops of this ether into a jar containing a white rat, instead of becoming anesthetized, the rat became greatly excited, leaped from the jar, and convulsed on the table top. Subsequent investigation revealed that hexafluorodiethyl ether at very low concentrations is a short acting convulsant in all animal species tested, producing a typical clonic and tonic type convulsion resembling that caused by electroshock and convulsant drugs used in psychotherapy. After extensive pharmacological study, the drug was cautiously tried in man and was found to produce the same syndrome as observed in animals. Today Indoklon is being widely used by psychiatrists as a substitute for electroshock therapy in acutely depressed

and schizophrenic patients. It is regarded by many experts as equal to or superior to the older procedures in psychiatry, but free from the terrifying fear of shock therapy which some patients experience. Thus, Dr. Krantz made the transition from anesthesia to psychiatry by way of the fluorinated ethers. Dr. Krantz still is working on new and more potent fluorinated compounds, and interesting results may be expected to come from his studies.

In his early days as professor in the Schools of Pharmacy and Dentistry, Dr. Krantz was particularly interested in drug assays and the measurement of physical properties of chemical compounds. In 1928, his first book appeared reflecting this interest: *A Treatise on Pharmaceutical Chemistry, Embracing Certain Special Topics in Analytical, Organic, and Physical Chemistry as They are Related to Pharmacy* (St. Louis, C. V. Mosby Co., 1928). This was followed two years later by *Fighting Diseases with Drugs—The Story of Pharmacy—A Symposium* (Baltimore, The Williams and Wilkins Co., 1931). In this symposium many eminent specialists in pharmacy, medicine, chemistry and related fields were brought together to contribute their thoughts and scientific findings to the rapidly growing science of pharmacy. This book reveals Dr. Krantz's talents for organization of many diverse specialties into a unified whole. Many other books have issued from Dr. Krantz's prolific pen, including *Anesthesia—Man's Redemption From Pain* (1944); *Formulary and Handbook of the Johns Hopkins Hospital* (1926, 1928, 1942); *A Portrait of Medical History and Current Medical Problems* (1962), a book on effective speech, co-authored with Governor Theodore R. McKeldin of Maryland, and with a foreword by Lowell Thomas, *The Art of Eloquence* (1952), a novel based on the story

of Insulin, *If Sugar Burns* (1944), and finally his monumental, *The Pharmacologic Principles of Medical Practice*, co-authored with his close friend and colleague, Dr. C. Jelleff Carr (The Williams and Wilkins Co., 1949). This volume broke many traditions among pharmacology textbooks. It was beautifully written in a concise and narrative style, liberally interspersed with historical and literary anecdotes as they apply to drugs and medicine, and liberally illustrated with pictures of men who have contributed to the growth of pharmacology. *The Pharmacologic Principles of Medical Practice* set the standards for later textbooks in pharmacology. It has gone through six editions in 16 years, has been translated into Spanish and Portuguese, and has been used throughout the world in schools of medicine, dentistry, pharmacy, and other institutions allied to the medical sciences. The new 6th edition, which appeared in 1965, is a large double-columned volume of 994 pages and contains nearly twice the amount of material in the first edition, attesting to the phenomenal growth of pharmacology. Some measure of the esteem in which this book is held by the academic world was demonstrated recently when the government of India placed a prepublication order of 5000 copies to be used in the medical institutions of India.

In addition to his epoch making contributions to anesthesia, Dr. Krantz has advanced the science of drug therapy in many other ways. He has explored many compounds in the group of alkyl nitrates and nitrates as blood pressure depressants and coronary vasodilators, developing Octyl Nitrite (Krantz, Carr and Forman, 1939); Isosorbide Dinitrate (Krantz, Carr, Forman and Cone, 1940); Chloroglyceryl Dinitrate (Burgison, Lee, Cowley and Krantz, 1962), and finally, on a biochemical basis, by advancing a hypothesis

on the mechanism of action and metabolism of nitroglycerine (Needleman and Krantz, 1964). His studies on xanthine vasodilators led to the development of theophylline sodium glycinate (Theoglycinate) (Krantz, Holbert, Iwamoto and Carr, 1947), a valuable anti-anginal drug and bronchodilator and the first study of xanthine drug metabolism (Truitt, Carr, Bubert and Krantz, 1947). Grant and Krantz (1942) studied a number of urea and thiourea derivatives on the oxygen uptake of tumor tissue and normal tissue by the Warburg technique. They observed that guanidine, thiourea, and several derivatives of the latter compound markedly depressed the oxygen consumption of excised tissues. This led Astwood in 1943 to discover the marked action of thiouracil in depressing thyroid function, and ultimately to the development of propylthiouracil and other valuable drugs useful in hyperthyroidism and related disorders. Dr. Krantz has furthered the chemical evaluation of digitalis and the chemical determination of digitoxin (Bell and Krantz, 1945). His extensive series of 29 papers on sugar alcohols, as well as unpublished but commercially available studies on "Tweens and Spans" have had immeasurable utility.

Perhaps the best known of Dr. Krantz's many researches is his work on aluminum compounds as antacids and buffering agents. In 1944 Krantz, Kibler and Bell reported on the preparation and pharmacologic evaluation of a new long-acting antacid and buffering agent, dihydroxy-aluminum glycinate (Alglyn, Robalate). This compound combined the virtues of aluminum hydroxide as a long-acting antacid and buffering agent and glycine, or aminoacetic acid, as an agent capable of rapidly neutralizing stomach acidity. This compound found ready acceptance by the medical profession and is extensively used at the present time for the treatment of

hyperacidity and gastrointestinal disturbances. Two interesting observations regarding the use of this drug have had a tremendous impact on therapeutics. The first concerns the ability of basic aluminum glycinate to inhibit the destruction of penicillin by gastric enzymes. Penicillin added to unbuffered gastric juice *in vitro* was rapidly destroyed, but gastric juice buffered with the aluminum compound caused only partial inhibition of the penicillin. These observations were verified clinically and led to the development of buffered aluminum penicillin preparations (Krantz, Evans, McAlpine, 1945). This was a tremendous step forward in penicillin therapy, and eventually led to the preparation of intramuscular penicillins with long durations of action.

A second observation of great significance concerns the ability of basic aluminum glycinate to promote the absorption of salicylates from the gastrointestinal tract and reduce the incidence of gastrointestinal upset caused in some patients by aspirin and other salicylates. Dr. W. D. Paul, of the University of Iowa, School of Medicine, had been studying the use of salicylates in the treatment of arthritis and other inflammatory diseases. While sitting in a railroad station in Washington, D. C., waiting for a train, Dr. Paul told Dr. Krantz of his experience with salicylates and gastrointestinal distress. Dr. Krantz suggested that Dr. Paul try his new antacid administered with aspirin in his patients. This suggestion was followed with good success, leading to the development of "buffered aspirin." Needless to say, this concept has had a tremendous effect on the use of salicylates in therapy.

In spite of his outstanding reputation as a research worker and scholar, Dr. Krantz's first love is teaching, and teaching takes precedence over research in his department. As Dr. Krantz sees the de-

partment's obligations to the State of Maryland, it is first to help turn out good physicians, and second to advance the frontiers of knowledge. He and his staff have fulfilled this dual obligation with distinction, as over three decades of medical students will testify.

Dr. Krantz's lectures were characterized by certain delightful mannerisms employed, no doubt, with a serious pedagogic purpose. Indeed, students of a generation or so ago will remember "The Hour of Charm" as many a student referred to Dr. Krantz's formal lectures in pharmacology.

The lecture was delivered obviously after great preparation. The professor would mount the dais, announce the subject and then proceed with the text, liberally interspersing his words with broad sweeps of the hand, a compressed smile accompanied by a nod and a twinkle of the eye, and occasionally by a type of an emphatic sonorous crescendo, one of which a former student recalled.

It was delivered during a lecture emphasizing rational therapeutics and the use of official drugs. There came a pause following which Dr. Krantz raised his head, turning it slightly and with raised right arm and finger pointing upwards, nodded sharply, and with an admonishing look, slowly and deliberately stated, "Woe is the fate of the unsuspecting young practitioner who falls victim to the honeyed words of the silver-tongued detail man sent out expressly to enchant him!"

Or was it during the lecture on foxglove that he announced with great gusto that "*Indeed*, the flower of medicine is 'Withering.'" As students used to say, Dr. Krantz often "turned the century" for, indeed, as he often said, "It was at the turn of the century that Abel came to Hopkins—." One former student and now a professor himself remembers a striking expression



Staff of Department of Pharmacology 1939

Sitting: left to right; Sylvan Forman, Edith Jane Moulton, Ruth Musser, C. Jelleff Carr, Dr. Krantz, Wm. E. Evans, Jr., Margery Ruppensberger, Dorothy Kibler, Henry L. Wollenweber. Standing: left to right; Lloyd Yeager, Donald Vidian, Frederick Bell, Norman R. Pinschmidt, Willard Harne, Wilson Grant, Maurica Rath, Murray Finkelstein.

often used in a discussion of narcotics. "It is better to enjoy the euphoria of morphine than to suffer the slings and arrows of outrageous fortune." The use of powerful figures of speech, the art of inflection for emphasis, and a measured eloquence with clarity and precision typified his classroom lecture.

The pharmacological education of Maryland medical students goes far beyond their didactic instruction in *materia medica*, pharmacy, prescription writing, toxicology, posology, pharmacodynamics, and experimental therapeutics. The aim of the department is to prepare students as future physicians to use drugs intelligently in the treatment of disease. Laboratory exercises paralleled the course of lectures, weekly conference periods and discussions were held with faculty and adjunct faculty members, and interdepartmental lectures were given the clinical departments of medicine, anesthesiology, and obstetrics.

One of the innovations introduced by Dr. Krantz was the "tea parties" held on Thursday and Friday afternoons. At this time, three or four students were invited to have tea and discuss pharmacological problems with faculty members, the adjunct faculty representing the Maryland Academy of General Practice, a resident from the Department of Medicine and fre-

quently visiting scientists. Such informal tutoring gave the student a valuable opportunity to gain insight into the subjects he studied.

During the second semester, each student prepared a talk on some pharmacologic topic and presented it to the regular and adjunct faculty. Talks were judged not only for the accuracy of their scientific content, but they were required to be well prepared and delivered in an acceptable style. Dr. Krantz's attitude toward such matters is best summarized by a motto on the wall of the pharmacology department:

The English Language is the most important instrument at your disposal. Learn to use it with precision.

The student who made the best presentation won the annual Paul Ehrlich Award, which carried with it a \$100 prize. One such prize-winning dissertation was chosen for publication in a medical journal a few years ago.

Every student passing through Dr. Krantz's course in pharmacology was regarded by the Professor as a personal friend, his office door was always open to receive students who wished to discuss their studies or personal problems with him. Countless alumni of the University of Maryland cherish him as a warm and

friendly person who was never too busy to talk over problems with them. During his years in the pharmacology department, 30 students earned the doctor of philosophy degree and over 3000 students the degree of doctor of medicine. Many of Dr. Krantz's closest friends are among these former students.

In addition to his teaching and research, Dr. Krantz has found time to actively participate in many extra-curricular activities. For many years, he has been an active member of Revision Committee of the U. S. Pharmacopoeia, having served as secretary from 1940-1950. He has been a consulting toxicologist to the U. S. Department of Defense, a member of many important N.I.H. committees, the Pharmacology Study Section, an active member of the American Society for Pharmacology and Experimental Therapeutics (member of the executive council since 1946 and Vice President 1949-50); Vice President of the American College of Cardiology; a member of the Executive Council of the American Chemical Society, and many others. He is a member of the American Association for the Advancement of Science, the New York Academy of Science, the American Pharmaceutical Association, the Society of Sigma Xi, the Society for Cancer Research, and a member of the executive committee of the Maryland Society for Medical Research. He has won many prizes and awards, including honorary Master of Science and Doctor of Science degrees. In addition, he has been an active member of Faith Presbyterian Church in Baltimore for many years, is a member of the Gibson Island Club and L'Hirondelle Club in Ruxton. He served as President of The International Torch Clubs from 1942 to 1946 and still attends most monthly meetings of this professional men's club.

Dr. and Mrs. Krantz (Helen King)

occupy a lovely home in Ruxton, Maryland, and are noted for their gracious hospitality and warm friendliness. Their daughter, Mrs. Claire Loescher, is also a resident of Baltimore. Dr. Krantz is an enthusiastic sailor and whenever duty permits, and a good wind prevails, he may be found sailing up and down the Chesapeake Bay in his sloop, the "Fluoromar." He is also an enthusiastic Oriole baseball fan, and frequently attends the games at Memorial Stadium to root for the Birds.

R. M. B. & J. A. W.

Continued from page iii

asserted, "Love makes the world go around, but research makes it go forward." I have shared in discovery—the increment of progress—in medical science, which has brought joy and great emotional satisfaction.

If this is true, in answer to the question of many of my friends, "why are you retiring?" Really I am not, I am simply being "retreaded." To one who was born at the dawn of the century, it seems prudent to relinquish one's duties while mental alacrity and physical vigor yet endure, rather than to wait until the ravages of time and the surly march of decrepitude make it impossible to attain the standards of excellence he established in life's high noon.

For more than three decades I have walked among you, teaching the Oslerian doctrine with a fidelity which has never wavered—that, "Only a good man can be a great physician." In research I have cherished truth and despised fallacy.

Now I look forward to the vesper of life with the firm belief that "Underneath are the everlasting arms." Adoring God and loving my friends, I hope to bear the fortunes and vicissitudes of the ever-approaching future with fortitude and dignity seasoned with humility. On this august occasion surrounded by so many loyal friends, my feelings are those so cogently expressed in the words of the English author, Hilaire Belloc.

"From quiet homes and first beginning

Out to undiscovered ends

There's nothing worth the wear of winning
But laughter and the love of friends."

Faculty

NOTES

Dr. Aubrey Richardson Becomes First Full Time Medical Director Of Keswick

ON AUGUST 2, 1965, Mr. Virgil A. Halbert, Director of Keswick, announced the appointment by its Governing Board of **Dr. Aubrey D. Richardson**, Assistant Professor of Preventive Medicine and Rehabilitation in the School of Medicine, as the Institution's first full-time Medical Director. Dr. Richardson will replace Dr. W. Grafton Hersperger, Baltimore Internist, who has served as part-time Medical Director since 1953. Dr. Hersperger will now become Chairman of Medical Advisory Board.

Dr. Richardson comes to Keswick with a broad and intense experience in the areas of chronic diseases and rehabilitation. He has served as Assistant Director of the Heart Association of Maryland's Work Evaluation Unit, has served as a member of Maryland's Committee on Chronic Illness, the Governor's Commission on Aging and is immediate past President of Region III, National Rehabilitation Association. He has also served as Assistant Professor in the School of Medicine and has served also as Co-ordinator of the Medical Curriculum and the Vocational Rehabilitation Counselor Training Program at College Park. Dr. Richardson's responsibilities will include the supervision of medical practice for the 205-bed Community Chest facility. He will also coordinate and intensify the medical care rendered by the 27 physicians associated with Keswick.

In a recent interview, Dr. Richardson announced that following a careful survey by an independent agency, that future plans for Keswick included an expansion of the chronic diseases and rehabilitation facilities and a specially developed protected apartment unit for use by couples one of whom might be considered incapacitated. A home-like apartment house atmosphere will be maintained

with individual units but with added facilities and services of a variable and adaptive nature contingent upon the disability. Facilities such as stores, food markets, etc. will be provided on a cooperative basis for those occupying the apartment facility. A close inter-relationship will exist between the chronic disease hospital, the rehabilitation facilities and the apartment unit.

Dr. Jerry C. Hunt, formerly of the University of Missouri Medical Center, has been named assistant professor of orthopedic surgery. Dr. Hunt is a graduate of the Vanderbilt University School of Medicine and served his residency in surgery and orthopedics at the University of Indiana and also at Vanderbilt University. Dr. Hunt will assist Dr. George N. Austin in conducting the affairs of the newly reorganized department of orthopedic surgery.

Dr. Charles A. Barraclough, professor of physiology, has received a 5 year grant of \$79,861.00 from the National Institute of Child Health and Human Development to continue his study of brain-ovulation mechanisms.

The work, an extension of preliminary studies on the rat, will be performed on guinea pigs and will attempt to determine what areas in the brain are responsible for stimulating the hypophysis to release the gonadotropic hormone. Other parallel investigation will concern the sex steroids.

Dr. Barraclough has been recently named to a member of the editorial board of *Endocrinology*, the journal of the Endocrine Society.

Dr. Emil Blair, assistant professor of surgery at the School of Medicine, is now on sabbatical leave, spending a year at Sweden's oldest medical school, the University of Uppsala. During the year he will participate in all activities of the department of thoracic surgery and will work

under the direction of professor Viking O. Bjork, its chief.

Dr. Eugene B. Brody, Professor and Chairman of the Department of Psychiatry, has been nominated an honorary member of the Peruvian Psychiatric Association. Membership was conferred upon him at a special meeting of the association held recently in Lima, Peru.

Dr. Garrett E. Deane, Instructor in Pediatrics, has been appointed to the Advisory Council of the Catonsville Community College, Catonsville, Maryland.

Dr. Theodore E. Woodward, Professor of Medicine, will address the College of Physicians of Philadelphia on April 6, 1966 on the subject, "The Experiences of an American Clinician in the Far East." Dr. Woodward will speak under the auspices of the Musser Lectureship, an annual feature of the College of Physicians of Philadelphia.

Faculty Lecturers at Scientific Assembly, Maryland Academy of General Practice

Some nine members of the Senior Faculty of the School of Medicine participated in the Annual 1965 Scientific Assembly of the Maryland Academy of General Practice held on October 2, 1965, at the Tidewater Inn in Easton, Maryland. The meeting was attended by several hundred members of the Academy, among whom are the most prominent physicians in the State of

Maryland who devote their time to family practice of medicine.

The theme for the session was largely related to pain. In the morning, **Dr. Harry Teitelbaum**, assistant professor of neurology, discussed the medical and psychiatric aspects of pain, while **Dr. Erland Nelson**, professor and head of the department of neurology, lead the discussion on Cranial and Other Neuralgias.

Dr. William C. Morgan, assistant professor of medicine, discussed Pain in Cardiac Disease.

The afternoon session was moderated by **Dr. Ephraim T. Lisansky**, chairman of Postgraduate Education Committee, and included a paper on neck, shoulder and arm pain by **Dr. George N. Austin**, professor and head of the department of orthopedics of the School of Medicine. The treatment of pain by nerve injection was discussed by **Dr. Martin Helrich**, professor and head of the department of anesthesiology, a presentation on abdominal pain was made by **Dr. Robert W. Buxton**, professor and head of the department of surgery, and a discussion of post-operative pain in the female genital tract was presented by **Dr. Arthur L. Haskins**, professor and head of the department of obstetrics and gynecology. **Dr. George M. Yeager**, noted vascular surgeon, professor of clinical surgery at the School of Medicine, discussed leg pain and vascular disease.

The Maryland Society for Medical Research

Its Origin and Purpose

DIETRICH C. SMITH, Ph.D.*

THE FOUNDING OF the Maryland Society for Medical Research was the natural outgrowth of a guerrilla warfare that had been going on for over 100 years between those who advocated and used animals in experimental medical research and those who opposed such practice with varying degrees of vehemence on ethical and humane grounds. The use of animals in medical research had launched a new era in man's unending warfare against disease. It is true that animals had served men interested in natural phenomena since Graeco-Roman days in sporadic and unmethodical ways but it was not until about 150 years ago that the newly developing science of physiology brought the controlled use of animals as a research tool into full flower. In spite of the obvious and manifest benefits of this method there were those who opposed vivisection with moral fervor. The movement gained momentum in England where it culminated in restrictive legislation that is still in force today and eventually antivivisectionism spread to this country where it became allied with numerous humane societies. This is not the place to review the tactics of these groups and the means whereby they persuaded well meaning but uninformed persons of prominence to support their cause. The attitude of the scientific world during this period was almost solely defensive and little was done to combat the antivivisectionists except to beat down from time to time attempts to stop or regulate animal experimentation by legislation.

In the late 1940's medical educators

and researchers decided the time for action had come and to fight back. Under the leadership of that indomitable champion of human freedom and a physiologist of renown, Anton J. Carlson, the National Society for Medical Research was organized under the sponsorship of the Association of American Medical Colleges. It was Dr. Carlson's strategy to take the offensive and to tell the public what animal experimentation means to medical research, what it has done and what it needs in the way of support, especially in the way of legislation. The organization has flourished to this day.

In Baltimore, which has always been a center for medical research, the experience was much the same as it had been nationally. In the late 40's the two medical schools were subject to increasing pressure and harassment from the Maryland Society for the Prevention of Cruelty to Animals. This organization had police power and through the exercise of this power brought about the arrest, on the premises of the medical schools involved, on two separate occasions, dealers who were delivering dogs to the schools for experimental studies. On one occasion the defendant was brought to trial and acquitted and in the other instance the charges were dismissed in magistrate's court. Even so the continuing threat of interference in work of a vital nature was constantly there. In 1949 Dr. Alan M. Chesney, the Dean of the Johns Hopkins Medical School, decided to do something about it, and in Dr. Chesney's characteristic way fully succeeded. He organized the medical

* Secretary, Maryland Society for Medical Research.

scientific community and with the help of two able and dedicated attorneys, Mr. John W. Avirett II and Mr. Van Velsor Wolf, persuaded the Baltimore City Council to pass an ordinance permitting the medical, dental, and pharmacy schools and the hospitals in the city to use the unclaimed stray dogs at the City Pound that would otherwise be gassed.

The opponents of medical research, however, were still determined to stop the use of dogs and launched a counter attack in the form of a referendum on an amendment to the City Charter which, if adopted, would effectively prevent the use of pound animals by the medical schools. It was obvious that a coordinated effort of considerable magnitude was needed to meet this attack and it would be necessary to enlist the aid of professional, business, and civic groups throughout the city to do the job. So the Maryland Society for Medical Research was formed and modelled after the National Society for Medical Research. The campaign of public education it waged to inform the people of the City of Baltimore just what medical research was doing and what it meant to them was eminently successful and when the votes were counted the referendum was defeated 4 to 1. This was a signal victory and showed the scientific world what could be done if the effort were made. It was also recognized that if the fruits of this victory were to be kept fresh, the work must go on. It was therefore decided that the MSMR would continue to operate and continue to keep the public informed regarding medical research and this it has done to this day.

Although the MSMR derives its inspiration from the NSMR it is in no sense an affiliate or a chapter of the national organization. It does not make any financial contribution toward its support and is not pledged to follow its lead in all mat-

ters of interest to them both. Obviously the goals of the two organizations parallel each other and they work in complete harmony. But again it must be emphasized the MSMR is completely independent and its policy is determined by its own Board of Directors, responsible only to the membership. Its only official connection with the NSMR is a place on the Advisory Board of this organization. The MSMR attempts to do on a state level what the NSMR does on the national. Other state organizations with similar purposes exist in Illinois, California and New York, and have been actively functioning for many years. Recently similar groups have been organized in Connecticut and Wisconsin.

To broaden its base of support the MSMR has always sought to include on its Board of Directors not only men and women directly concerned in medical research but also men and women of standing in the professional community, recognized civic, professional and religious leaders. It has also been fortunate in having a series of Presidents from outside the medical profession beginning with Mr. Van Velsor Wolf, followed by Mr. Albert Burns, Mr. Ralph Edwards, Mr. Frank Baker and now Mr. Carlyle Barton, who is the President elect.

Over the years the MSMR has evolved its seven-point program dedicated to informing the public about the needs, goals, and methods of medical research with special emphasis on the role of animals. This it does in various ways as follows:

1. Publication three times a year of a *Bulletin* giving news of the Society's activities and keeping members up to date on what other organizations of like purpose are doing as well as keeping them informed of the activities of those groups who are opposed to animal experimentation.

2. Organizing at a local level campaigns to keep the general public informed regarding the effects of any proposed legislation on medical research. For the past several years strong efforts have been made in Congress to pass legislation that would regulate the use of animals in medical research supported by federal funds. Since this means practically all such research carried on in the country today, obviously such legislation would have far-reaching effects. The MSMR along with other scientific and professional organizations believe such legislation to be highly detrimental to the best interests of the people. The proponents of such legislation, however, are well organized and with powerful support from key members of Congress. So far the efforts of the medical research group have succeeded in keeping such legislation bottled up in committee but the fight is far from won and there is every expectation that determined efforts will be made to get the 89th Congress to take some action.

3. The Society owns a number of motion pictures dealing with animal experimentation and animal care. These films are loaned without cost to schools or other organizations for showing. They tell the story of medical research and how animals have made possible the almost miraculous progress in the treatment of human and animal disease in the past fifty years. Other films in the group show that laboratory animals receive the best possible care as well as teaching those involved in animal care the best procedures to use. Matters of diet, maintenance of quarters, handling, control of parasites and disease are discussed.

4. The Society feels a strong obligation to inform young people of the opportunities that are open to them in the health science field. The necessity for having a group of well trained and well informed

pool group of this sort to fill the ranks of those involved in all aspects of medical research and care are well known to anyone who has sought for a medical technologist or needed the services of a properly trained nurse. To this end the Society has purchased a number of films which deal with careers in medical and paramedical fields such as nursing, medical technology, physical therapy and pharmacy. These films are also circulated to schools on a free loan basis. The Society is constantly on the lookout for new films of this nature in an effort to keep its library up to date. All of these films, as well as those in the animal experimentation group, have proved extremely popular and are in such great demand that one of the principal expenses of the Society is keeping these films in good repair and securing replacements as they wear out. Bookings are usually sold several months in advance.

5. During the course of a year the Society receives approximately 500 pieces of mail requesting information about careers in medical research, literature on animal experimentation and general inquiries concerning all aspects of medical science. Each and every one of these is answered. To meet this demand the Society keeps on hand numerous booklets and pamphlets telling the story of medical research, how animals have served in the past and are serving now in solving the current medical problems concerned with cancer and vasomotor diseases, telling the opportunities in the fields of medical research and generally dispensing information which they hope will bring about an intelligent understanding of what medical research is all about.

6. The Society also arranges for interested groups, from high schools throughout the state, tours of the medical research laboratories in Baltimore. Usually these consist of either biology classes or science

clubs in groups of 15-40. Special emphasis is put on the role of animals in research and the students are given the opportunity to see how they are used in the experimental situation. For the most part such groups come mostly from the Baltimore area but on occasion they have come from further afield.

7. Last but not least, one of the most popular features of the Society's program is its Small Animal Classroom Project. This project has received national attention.^{1,2} Briefly it consists in supplying to classrooms, throughout the State of Maryland, small animals, especially rats and mice to be used in a simple experiment on nutrition, genetics, or learning. None of these experiments involve any mutilating procedures or the administration of any kind of drugs or carcinogenic agents. The Society firmly believes that such experiments have no place in the classroom unless done under expert and continuing supervision. Complete and detailed instructions are supplied along with the animals. The animals are sent only to the teacher who must first sign an application and a pledge that the proper care of the animals will be taken and that they will not be used in an unauthorized way. In this way students learn certain elementary facts about animal care and the use of animals as a research tool with special emphasis on the necessity of proper control experiments.

The use of animals in this way has aroused marked opposition among those same groups who would seek to impose restrictions on the use of animals in medical research. Numerous humane and antivivisection societies throughout the country have sought legislation which would prevent such classroom exercises. The MSMR is proud of its record in showing that such a program is feasible. The fact that the program has gained enthusiastic

support over the years from the teaching profession has been amply demonstrated. There is no question about its usefulness as a learning tool.

To operate such a program requires money and the MSMR like all such organizations never has enough to do the job as well as it thinks it should be done. However, its members have loyally supported it through the years and, through rigid efforts at economy, costs have been kept to a minimum. Except for one part-time secretary, all the work is done on a volunteer basis. Although it is difficult to prove such a statement, it is doubtful if a contributor gets more for his dollar's worth from any other organization in the health field. The Society is also convinced that the fact Baltimore and Maryland have been relatively free from harassment by groups opposed to animal experimentation in recent years is in part due to its work. The Society expects to continue its activities as long as it has a role to play and as long as it receives the necessary support. New members are earnestly solicited.

Finally, a word should be made about the relation of the Society to humane societies and animal welfare organizations in general. Throughout this article such groups have been described as being in opposition to medical progress. Unfortunately, this is true in a large number of cases but it is equally true that there are societies which work with medical schools and research institutions in harmony and peace. Such a one is the American Society for the Prevention of Cruelty to Animals in New York City and the cooperation between this group and the New York medical schools shows what can be done if people of good will get together and discuss their problems in an amicable fashion. Needless to say, the ASPCA has incurred the wrath of some of its sister organizations and is held up to scorn as

a renegade group by the extremists in their camp. But cooperation is possible and no one seeks more earnestly than those involved in medical research. No group is more concerned about proper animal care. This is both because of sound practical reasons and because contrary to the image projected by some, medical scientists are not a group of mad, sadistic monsters who take special delight in torturing helpless and defenseless animals. Through the years medical researchers have sought continuously to improve animal care. The Animal Care Panel, a national organization composed of those

involved in using, selling and caring for experimental animals and supported by medical schools, has worked untiringly for proper standards of animal care. The Maryland Society for Medical Research supports such programs with wholehearted enthusiasm.

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Book Reviews

The Immunologically Competent Cell (CIBA Foundation Study Group No. 16) ed. by G. E. W. Wolstenholme, Julia Knight. 110 pp. Little, Brown and Company, Boston, 1963.

THIS CIBA FOUNDATION book's subject is the nature and origin of the immunologically competent cell. Its discussants are a study group of eminent scientists who have made notable contributions to the understanding of this subject. Among the topics discussed are "Definition of the Immunologically Competent Cell," "Role of Small Lymphocytes in the Rejection of Homografts of Skin," and "The Role of the Thymus in the Origin of Immunological Competence." The discussants included Macfarlane Burnet, P. B. Medawar, J. L. Gowans and J.F.A.P. Miller among other distinguished gentlemen.

This edition is splendid for those working in this or para allied fields, and is not intended as a review or a simplification of a complex subject.

MICHAEL B. A. OLDSTONE, M.D.

Cellular Biology of Myxovirus Infections, CIBA Foundation Symposium. Edited by G. E. W. Wolstenholme and Julia Knight. Pp. 368. Little, Brown and Company, Boston. 1964. \$12.00.

THIS HANDSOME book provides a useful source of material to those investigators working not only with myxoviruses but other viruses as well. Presented in this volume are papers concerned with recent developments in structure, physiology and biochemistry of this group of viruses, as well as papers on antibody response and cellular and humoral factors of defense.

Illustrations accompanying individual papers are excellently reproduced and the papers them-

selves are, in general, followed by extensive references to the literature.

MICHAEL B. OLDSTONE, M.D.

Intestinal Biopsy (CIBA Foundation Study Group No. 14) ed. by G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Margaret Cameron, M.A. 120 pp. Little, Brown and Company, Boston 1962. \$2.95.

INTESTINAL BIOPSY is the published proceedings of a group of eminent international research workers interested in the relationship of small intestinal biopsy to the pathology and physiology of intestinal diseases. The subject matter embraces the study of biopsy material by light, electron and dissecting microscopes and by enzyme studies. Discussion following each paper and a general discussion at the end of the book point up the difficulties both in the terminology and in the definition of pathologic change in the small intestine, the specificity of morphologic changes, the pitfalls in diagnosis and lack of correlation between morphologic and biochemical alterations. Although candidly admitting the current limitations in the interpretation of intestinal biopsy the book also points out the value of this investigative tool still in its first decade of use. In focusing largely upon aspects of the gluten enteropathies the book brings out the value of biopsy in diagnosis and during the treatment of these diseases.

This small, inexpensive, paper backed book is well indexed and adequately illustrated. It contains a sizable bibliography which, however, does not contain the titles of the included papers. This book offers a concise review of the applications of intestinal biopsy with emphasis on the gluten enteropathies and should be of particular value to gastroenterologists and pathologists.

HOWARD LEVIN, M.D.

Prognostics, Predictions and Plans

WHILE THE BULLETIN summarizes certain highlights of the past 50 years of its publication, certain members of the faculty and alumni have been asked to predict what the future of their specialty might hold for the next 50 years. Readers of the BULLETIN in 2015 will be the judge of the accuracy of these predictions. That science and Medicine are rapidly moving toward important solutions is certainly reflected in the past 50 years of the BULLETIN. We hope the thoughts of these serious scholars will be interesting and provocative. Their validity and accuracy will have to wait.—Ed.

Alcoholism—The Future

THE MOST necessary research in the field of alcoholism will be a revelation of its cause. Already it is apparent that this disease has a multifactored etiology involving 1) biochemical factors, genetically transmitted, 2) personality and emotional factors arising from the environment and 3) factors depending upon the role of alcohol in the culture or society. Further research into individual patterns of alcohol metabolism and behavioral responses to alcohol may be expected to illuminate differences between alcoholics and non-alcoholics. More careful studies defining personality traits and emotional problems leading to alcoholism are already under way. An improvement of attitudes toward alcohol and better education on what role alcohol actually plays in society is greatly needed. There is a good probability that improvements in tranquilizing and other psychotropic drugs will provide better symptomatic control of the disease while the cure is sought.

EDWARD B. TRUITT, JR., PH.D.
Professor of Pharmacology

Clinical Biochemistry

THE NUMBER of chemical tests on body fluids will continue to increase both in number and variety. More screening tests will be run early in life to detect metabolic abnormalities at the cellular level. More attention will also be paid to programs aimed

at early detection of chronic degenerative diseases. It is probable, therefore, that batteries of tests will be run as part of periodic health examination. The normal values for various substances will then be established for an individual early in life and then used as a basis for comparison with values obtained later.

MARIE A. ANDERSCH, PH.D.
*Associate Professor of
Biochemistry in Medicine*

Child Development

MENTAL RETARDATION, neuro-psychiatric learning disabilities, behavior disorders and childhood psychoses are among the important developmental disorders of childhood for which adequate knowledge and understanding are presently lacking. In the next 50 years we can anticipate fundamental contributions to the body of information concerning these often obscure problems. Genetic, metabolic, neurologic and histo-chemical studies will define networks of complex abnormalities of the central nervous system. Investigations of how the human organism, either intact or impaired, interacts with environmental factors will provide new techniques for the prevention, identification and treatment of the obscure developmental disorders of childhood.

In spite of this newer knowledge, chronic handicapping conditions will increase in prevalence as mortality rates are improved

and individuals with impaired function survive insults which in earlier times were fatal.

RAYMOND L. CLEMMENS, M.D.
*Assoc. Prof. of Pediatrics,
Director, Central Evaluation
Clinic for Handicapped
Children*

Dermatology

LOOKING AHEAD for dermatology at the University of Maryland over the next fifty years should first bring improved modern and more spacious clinical and laboratory facilities which the new OPD building will provide in a few years. Laboratory and clinical investigative research facilities plus our very active clinic, at present one of the largest in volume, if not the largest in the city, will help shed new light on many basic diseases whose etiology is unknown and whose treatment could be improved by new discoveries. We look forward to continuing and improving our already excellent teaching program. We expect in our specialty of dermatology to see our division growing in a medical school that is expanding in all its divisions and departments for the next fifty years constantly for the goal of better clinical teaching and research techniques.

EUGENE S. BERESTON, M.D.
Associate Professor of Dermatology

Dermatology

DERMATOLOGY, even more so than other specialties, has profited so much by the development of antibiotics and cortisone in the last ten or so years that hospitalization is rarely necessary in the treatment of dermatologic diseases. In the study of skin diseases dermatopathology and the electron microscopic examination of the skin have particularly aided in the advancement in the study of skin diseases.

For the future, I would predict that biochemistry and the study of enzymes of the skin will advance the knowledge of not only the skin diseases but also of general medicine. The skin makes an ideal subject for the study of these because of its availability.

FRANCIS A. ELLIS, M.D.
Professor of Clinical Dermatology

Gastroenterology

GASTROENTEROLOGY is just now embarking on its own "golden decade" which might well last for the next 50 years. Advances in this specialty with its many ramifications and branches into other divisions of medicine should provide the internist with a most rewarding and exciting professional career.

Major advances and breakthroughs in biochemistry, enzymology, electron microscopy, immunology, specialized diagnostic procedures, etc. plus the stimulation by a whole host of young scientists and physicians has provided an investigative impetus that will unravel the mysteries of normal digestion and the malfunctions that occur so frequently in the gastrointestinal tract. Only when the basic mechanisms of health and disease are clearly understood will diagnosis and therapy truly flourish. Much of the "magic and theatrics" that has surrounded therapy particularly is being replaced by specific medications dictated by an understanding and appreciation for the disturbed bio-physiological processes.

Truthfully, the etiology of simple duodenal ulcer is still not clearly understood. New thoughts and approaches are required for the exploration of other problems of "inner-space" such as gastrointestinal cancer and pancreatitis. Research in liver disease and malabsorption already vigorously underway will lead to spectacular discoveries. Cirrhosis, a terrible problem, may well become preventable. Lack of specific enzymes which cause many of the "idiopathic" steatorrheas await only effective enzyme replacement therapy.

Yes, the fibroscope, the exfoliative cytologic process, the image amplifier have already produced; but, the best is yet to come as the physician-scientist takes the bedside gastrointestinal problem back to the basic science laboratory to discover why he has the problem in the first place.

HOWARD F. RASKIN, M.D.
*Associate Professor of Medicine
Head, Division of Gastroenterology*

Gynecology

AN ATTEMPT to forecast 50 years in Gynecology makes one think first of Gynecological cancer. This disease, along with other can-

cers, will probably be a rarity because of the almost breakthrough at this time in methods of detection by blood samples, by vaccines to prevent the cancer; Lasser light and chemotherapy to cure undoubtedly will make this disease almost a rarity.

Transplantation of organs, particularly the ovary, will be helpful and commonplace. The science of geriatrics in general will be pushed back as medical science increases the span of life. Old age will seem middle age and old age will be more enjoyable and menopause will be a thing of the past. Population explosion will be curtailed by cheap and efficient methods of contraception. Interruption of pregnancy, either by legitimate or illegitimate means, will be a procedure of the past. Venereal disease will be curtailed and controlled beyond all conception at this time. Medical schools will include in the curriculum a program in sexual adjustment in marriage and also in marriage counseling.

ERNEST I. CORNBROOKS, JR., M.D.
*Associate Clinical Professor of
Gynecology and Obstetrics*

Gynecology

IN THE NEXT 50 years dramatic developments will occur in the area of reproduction. Interestingly these will be compartmented in diametrically opposed areas: the prevention of reproduction and the perfection of reproduction. The present emphasis on population control will increase to the expected result of satisfactory "on and off" fertility for both males and females.

Great strides in the understanding of genetics and agents affecting chromosomal composition may lead to prevention of undesired effects, and perhaps even some controlled manipulation of hereditary factors.

The environment required by a developing ovum may become artificially available to the point that incubation may appear on the scene and potentially relieve females of the burden of pregnancy altogether. Perhaps in 50 years or more the social complications resulting from this will be more prominent than any of the technical problems. In our own institution projected expansion should result in an environment permitting an in-

creasing contribution from the University of Maryland.

EDMUND B. MIDDLETON, M.D.
*Assistant Professor of Obstetrics
and Gynecology*

Gynecology & Obstetrics

THE SPECIALTY of Obstetrics/Gynecology is closing an era of formulation and consolidation. The current generation entering the specialty is on the threshold of a new era.

The major concern in obstetrics will be one of manpower. No longer can the profession tolerate the waste of skills of long educated and highly trained men to perform the functions of a midwife. Inevitably, the current system must give way to one in which skilled nursing personnel are trained to conduct what is a physiological process of the female organism, and to recognize the earliest signs of abnormality so that the obstetrician may be consulted.

The greatest advances in gynecology will occur in the realm of endocrinologic biochemistry. Disturbed gynecologic function is the earliest indicator of endocrine disturbance in the female. The effective and reversible control of fertility will be part and parcel of these new developments.

If these two propositions are correct, as I believe them to be, then medical education must change. We can look forward to graduates thoroughly trained in the basic sciences and diagnosis who will then do a year of straight medicine. Teaching of the surgical specialties and subspecialties should begin with the years of residency, thus minimizing duplication and the waste of time now so evident in our system of medical education. Hopefully, this will reduce the loss of time and unproductive years, so that a physician will begin earning at an earlier age.

GEORGE A. MAXWELL, M.D.
121 S. Washington St., Rockville, Md.

Medical Mycology

INTEREST IN the mycoses has ebbed and flowered during the century and a quarter that has passed since Schoenlein showed that the ringworm, *fayus*, was caused by a fungus. This discovery antedated by nearly 40 years the experiments of Koch, which proved the etiologic relationship of the bacterium,

Bacillus anthracis, to anthrax in animals and which led, in rapid succession, to several very important etiologic discoveries among bacterial diseases. However, significant advances in medical mycology awaited the thorough investigations of Sabouraud into the dermatophytoses during the last decade of the 19th century which culminated in the publication of his *Les Teignes* in 1910. By this time the etiologic agents of actinomycosis, sporotrichosis, coccidioidomycosis, histoplasmosis, North American blastomycosis, and cryptococcosis had been identified.

Broad interest in the medical mycoses in the United States appears to have waned then until the 1930's when a depressed economy forced the occurrence of large migrations and, coincidentally, the appearance of conspicuous epidemics of tinea capitis involving hundreds and thousands of children. World War II caused an even greater resurgence of interest following the dispersal of troops throughout tropical and subtropical climates where fungal infections occurred with high frequency and few individuals in the medical corps were trained to diagnose them.

The prevailing interest in the pathogenic fungi is being sustained by expanding knowledge of their role as "opportunists," i.e., their propensity for causing infection following therapy involving wide spectrum antibiotics, corticosteroids, or anti-neoplastic drugs; and their importance as superimposed infections in the debilitated patient suffering from such diseases as diabetes mellitus, Hodgkin's disease, leukemia, etc. As a result, current medical literature is replete with references to opportunistic diseases such as candidiasis, aspergillosis, and phycomycosis (mucormycosis). In support of this expanding knowledge have been remarkable advances in differential diagnostic techniques in the areas of culturing and histopathology. Moreover, the last fifteen years have witnessed important additions to the therapeutic armamentarium against the mycoses, e.g., nystatin, amphotericin B, and griseofulvin.

For the future there is a need to continue to investigate the problem of cross reactions among the various fungi, and through antigenic analysis arrive at serologic and immunologic systems with greater degrees of specificity and diagnostic significance. The

procedures of immunofluorescence and immunodiffusion may well become adapted to the routine diagnostic laboratory, rather than be limited in their application as "tools" of the researcher. There is a need for a wider variety of differential culture media; and a great need, also, for more effective and less toxic antimycotic therapeutic agents. Much remains to be learned about the ecology and epidemiology of the fungal agents of disease; and the status of some infections thought to be fungal is yet to be clarified, e.g., pneumocystosis and rhinosporidiosis. The part allergy contributes to the mycotic process is a moot point still, but may prove to be very important in explaining the reaction to infection in patients with pulmonary affections such as bronchial aspergillosis and farmer's lung. Finally, it must be stated that for some time to come education will continue to expand in the discipline of Medical Mycology to the point where it will no longer be considered an esoteric subject, but be a practical part of the training of all who are interested in the differential diagnosis of infectious diseases.

ANDREW G. SMITH, PH.D.

Associate Professor,

Department of Microbiology

Neurological Surgery

THE SCOPE of neurological surgery—and, for that matter, all branches of surgery—will be both limited and altered by preventive measures and by medical rather than surgical methods of treatment. The etiology of neoplasms will be sufficiently well understood to prevent most of them from developing and the few that are not amenable to such immunization will be treated with medications rather than surgery. Congenital anomalies will be prevented by a combination of premarital investigations of prospective parents and appropriate advice and medication controlling conception and pregnancy. Hereditary neurological disorders will be rare because of government sponsored conception control programs. The correction and prevention of a deficiency component to the demyelinating diseases will have virtually eliminated these disorders. Dietary control and lytic substances will delay the development of vascular insufficiency problems. Intervertebral discs will continue to herniate but

the offending fibrocartilage will be destroyed by a laser-like technique rather than being surgically removed. The management of craniocerebral and spinal trauma will be modified primarily by the advent of a technique whereby nervous tissue in the central nervous system can be made to regenerate rather than being replaced by gliosis when destroyed. Psychosurgery will be of historical interest only since psychiatric disorders will long since have been found to be for the most part of biochemical and/or metabolic origin. Hysteria and/or malingering will continue to present when circumstances are appropriate but diagnosis may be immediately differentiated by electronic methods. Life will remain a fatal disease, though the course of this disease will be significantly lengthened.

WM. H. MOSBERG, JR., M.D.
*Assistant Professor of
Neurological Surgery*

Obstetrics

WITHIN THE next 50 years, Maternity Care will undoubtedly follow the geriatric field into "Medicare" via Social Security or another carrying agency. When it does, I hope and expect that some equitable method will be devised for uniform geographic distribution of obstetricians, of necessity subsidized by the government in low-income areas. Incidentally, my forecast includes a footnote that such a distribution will quiet the academic clamor for training of midwives. Medically, we can safely prognosticate a great reduction in the frequency of severe pre-eclampsia and eclampsia, and I certainly hope the pediatrician will come up with an answer to atelectasis and hyaline membrane disease.

GEORGE E. WELLS, JR., M.D.
*Assistant in Obstetrics and
Gynecology*

Ophthalmology

TREMENDOUS ADVANCES in the treatment of diabetic retinopathy, degenerative retinal disease, uveitis and glaucoma are to be expected because of the research efforts in these fields. The laser, cryosurgery, and "instant vitreous" will drastically change the treatment of retinal detachments. Ocular

tumors will be differentiated by ultra sound and destroyed by laser beam. Cataracts will be removed and replaced by artificial lenses. Eye tissue will be preserved in the living state, so that corneal and scleral transplants will be possible at anytime. All ocular surgery will be done under the microscope.

Closed circuit color television in the Medical School will be used routinely in the operating room, permitting the surgeon to tape operations and later critically review his technique. The television ophthalmoscope will permit presentation of patients to large groups, and taped patient presentations will be used extensively for teaching.

RICHARD D. RICHARDS, M.D.
*Professor and Head
Dept. of Ophthalmology*

Forensic Pathology in the Next 50 Years

AT THE present time, Maryland and Virginia operate the only two well-organized, centrally staffed, state-wide Medical Examiner Systems in the United States. From an organizational standpoint, there would seem to be little change to be expected in our Department. From a volume standpoint, the case load of the Medical Examiner's Office serving the Metropolitan area will undoubtedly double by the year 2000 A.D., as the population doubles in the interim. This will mean that the teaching material available to University students through the Medical Examiner's Office will double, and will total more than 3000 autopsies per year.

With the construction of the new Medical Examiner's Building on the southwest corner of the Baltimore Campus in the next few years, the Department will have facilities to handle the case load and to increase greatly its research and training activities. As the other 48 States abandon their antiquated Coroner Systems and change to a Scientific Medicolegal Investigative System, the demand for trained Forensic Pathologists will grow and we can confidently expect to become the largest and most active Training and Research Center in our field in the United States of America.

RUSSELL S. FISHER, M.D.
Professor of Forensic Pathology

Physiology

THE ACCELERATING pace of progress in medical research must prepare us for unexpected developments within the next fifty years. This is especially true of the nervous system, for this is the organ system about which we seem to have the most to learn. Our increasing understanding of chemical events in the brain will certainly lead to continued progress in chemical control of metabolism, transmitter activity and growth of both neural processes and non neural elements. Through such understanding problems of mental illness, mental retardation, demyelinating diseases, neoplasms and epilepsy will be curable. In addition, the level of capacity of "normal" individuals will be considerably increased by similar means. Developing knowledge of the factors involved in the metabolism and growth of neuronal processes, coupled with progress in the area of immune responses, may make possible the transplantation of the central nervous system. Indeed, the first steps along these lines have been taken by studies in which neural structures have been excised and reimplanted in the same animal and by recent experiments in which the whole brain has been removed from monkeys and kept "alive," with a normal EEG, for days by artificial means.

Our advancing knowledge of the brain and the consequent possibilities for control of both normal and abnormal behavior will surely within the next fifty years lead those who study the nervous system to the same social and moral issues that have confronted nuclear physicists for approximately the past quarter of a century.

PAUL D. COLEMAN, PH.D.

Future of Physiology

SOME 50 years ago the application of chemistry to biological problems separated Biochemistry from Physiology and now the application of physics is creating another discipline, biophysics. But both chemistry and physics are still pertinent to what some consider to be the future of physiology, viz., the study of all aspects of biological control systems, nervous and endocrine. Thus, this department has staff members trained in anatomy, chemistry, endocrinology, psychology, and communications engineering as well

as biology. Much of the work in the department is directed toward an understanding of the electrical and chemical activity of the parts and the totality of the nervous and endocrine control systems, running the gamut from the membrane of the squid giant axon to the psychophysiology of sensory processing, learning, and intelligence.

WILLIAM D. BLAKE, M.D.
Professor and Head
Physiology Department

Preventive Medicine and Rehabilitation

IF MORE of the diseases which produce acute episodes such as heart disease and cancer are controlled as has been predicted, then the prediction that hospitals of the future will be comprised of a small acute service surrounded by a large complex of out-patient oriented services aimed at assisting the chronically ill or disabled maintain the highest level of function seems a realistic one. Preventive Medicine and Rehabilitation only recently becoming more involved with chronic illness is already producing some influence on medical education, community planning, and the recruitment and training of a large number of the so-called para medical services which are required in this kind of program of patient and environment management. In the next 50 years I would expect to see a marked increase in the kinds of cooperating services as well as the numbers of individuals participating in order to assist the preserved disabled by congenital or otherwise uncontrolled diseases or accidents and older population to function in a much more complex society. The service area has been projected as the outstanding possibility for those who will be retreating from the effects of automation. The physician will be able to bring his increasingly specialized knowledge to a more sophisticated multidisciplinary approach and will not have to function in areas that are interpreted as being outside his primary concerns.

The medical student will be taught or have an opportunity to learn the nature of these other competencies while they will become more realistically appraised of medicine's skills.

As one of the oldest and best established

professions, medicine will be looked to for leadership and will provide it, serving as a nucleus around which services pertinent to health will be supplied. Preventive Medicine and Rehabilitation's epidemiologic type approach will assure balance and perspective and as nearly as possible apply the best from the past to the very different future. The large segment of the population who are said to be suffering from a fragmentation of services that will not serve the needs of chronic impairment with resultant maladjustment and dependency can expect that these services will be delivered in a coordinated and useful manner. Rehabilitation will be ever hopeful for the advances of surgery and other medical skills which may make less necessary reorientation of those it is trying to assist in making a satisfactory functional adjustment whether it be directed to work, recreation, or self care. A greater appreciation of the emotional aspects of simply being taken out of step with the normally functioning populace by chronic impairment will greatly facilitate helping those who find readjustment necessary. The experienced and accomplished multidisciplinary team will bring all that is pertinent to bear and will mobilize the community to support and participate in comprehensive health care designed to overcome the seeming inadequacies of a static mode of operation in a vastly expanding, changing, and complex society.

AUBREY D. RICHARDSON, M.D.

Psychiatry

IF THE present progress in Psychiatry continues, it is very likely that fifty years from now a great majority of community hospitals will have Departments of Psychiatry in order to provide comprehensive medical care in the communities which they serve. This prediction is based on the fact of the rapid increase in a number of psychiatric sections in general hospitals within the past few years. There are currently some six-hundred such hospital departments in operation. Patients who would otherwise have been admitted to public mental hospitals are now treated within their own communities and the stigma of mental illness is, thereby, greatly diminished.

Within the next 50 years the further de-

velopments of teaching Psychiatry in undergraduate medical education will have advanced to such an extent that medical graduates will be well prepared to undertake the treatment of many patients suffering from mental disorders and there will be far less need for referring them to psychiatrists in private practice. The present revolution in Psychiatry is developing more and more professional competence of practicing physicians through courses in the basic principles of Psychiatry currently being given throughout the country in universities, etc.

Within the next 50 years there will have developed a complex of psychiatric services in most of the larger communities and there will be far less need for the admission of patients to public mental hospitals.

LEO H. BARTEMEIER, M.D.

*Clinical Professor of Psychiatry &
Medical Director, The Seton Institute*

Pulmonary Research

THE CURRENT rapid progress in anatomical and physiological studies is attributable, in part, to the advent of new and powerful research tools and to the development of improved research techniques. Although, in the teaching curriculum, anatomy and physiology are still treated as individual subjects, in the anatomical research laboratory the "boundary" between anatomy and physiology is no longer distinguishable. We have entered the era of "Four-dimensional Anatomy." Virtually every organ of the body may now be studied in the four dimensions in which all cells and tissues live; i.e., the three of space and the too-frequently neglected one of time. The "frozen" instant in the life history of a tissue observed in a thin, two-dimensional, caricaturish, oftentimes artefactually distorted section on a slide tells us little or nothing of the tissue's past, what it might have done a little while hence, or anything about its relationships to the rest of the organism at the moment of death.

The lung (perhaps more than any other organ) must be studied in all four dimensions; i.e., *in vivo*, in order to learn all that we need to know about its complex morphology and functions. Experimental methods are now available from the microscopy and cinematography of the living lung in the closed

chest of the normal unanesthetized animal. Now, for the first time, we are able to see the lung as it lives and breathes.

I predict that during the next half-century, combinations of anatomical and physiological methods will teach us the neural, chemical and other factors that are involved in:

a) The Control of Respiration. When combined with existing knowledge of the so-called respiratory centers, rapidly accumulating information on the recently discovered pulmonary glomus, its innervation and responses to pharmacologic agents will provide a better understanding of the mechanism that regulates respiration and should supply a rational basis for the treatment of a large group of respiratory diseases.

b) The Regulation of the Quantity and Physical Properties of Tracheo-bronchial Secretions. This knowledge will provide improved methods of treating pulmonary disorders such as chronic bronchitis, asthma and mucoviscidosis.

c) Normal Ciliary Activity in the Tracheo-bronchial tree. Current and future studies on this important self-cleansing mechanism of the lung and identification of many of the airborne agents that impair or halt ciliary activity will play an essential role in developing efficient methods for the control of industrial air pollution.

d) The Control of Bronchopulmonary Vascular Anastomoses and of the Peripheral Pulmonary Circulation. This should provide a basis for the more successful management of pulmonary thromboembolism.

e) The Production and Mobilization of Pulmonary Alveolar Phagocytes in Response to Infection and Atmospheric Pollutants.

f) The Production of Pulmonary Surfactant. Pulmonary alveoli are normally lined by a thin film of surface active fluid which is responsible, in large part, for the normal elastic properties of the lung. This surfactant film is lacking in the lungs of infants that succumb to "Respiratory Distress Syndrome of the Newborn" (also termed Pulmonary Hypoperfusion Syndrome). Better understanding of fluid dynamics in the peripheral pulmonary circulation and pharmacologic approaches to the improvement of pulmonary alveolar capillary blood flow

should enable physicians to greatly reduce the mortality from Respiratory Distress Syndrome of the Newborn which, at present, is our No. 1 "baby-killer."

These are but a few of the pressing problems that will find at least partial solution. With increasing longevity in a rapidly expanding population, and with increasing prevalence of respiratory disorders, the next 50 years should be an age of vigorous, exciting, and rewarding pulmonary research.

VERNON E. KRAHL, PH.D.
Professor of Anatomy

Progress in Pulmonary Research

MORE CONTRIBUTIONS to our understanding of the anatomy and physiology of the lung have been made within the past two decades than in the preceding three centuries.

Recent developments in pulmonary anatomy, physiology, experimental pathology, surgery and immunochemistry will form the basis for many new advances in our understanding of normal and altered pulmonary physiology. During the next 50 years the principal offending industrial and automotive air pollutants will be identified and substantially reduced in our urban atmosphere. This, plus the recognition and elimination of irritants and carcinogens in cigarette smoke, will markedly reduce the incidence of chronic bronchitis, pulmonary emphysema, and bronchogenic carcinoma. Current studies on the surfactant alveolar lining film and on the reflex control of the pulmonary circulation will uncover the basic pulmonary defects in respiratory distress syndrome of the newborn, and point the way to the successful treatment of our number one baby killer. *In vivo* studies of pulmonary physiology will elucidate the mechanism of the control of respiration and enable the physician to improve pharmacologically the ventilation and perfusion of diseased lungs.

VERNON E. KRAHL, PH.D.
Professor of Anatomy

Surgery

Cardiac Disease: It is anticipated that all of the defects both congenital and acquired will be subject to easy and full ultimate correction. This includes coronary artery

disease. Also within the next 50 years it is anticipated that successful homotransplantation of the heart will be established as well as artificial intrathoracic hearts.

Pulmonary Disease: With continuous improvement in diagnosis and in therapy it is anticipated that carcinoma will not be the major problem which it is today. On the basis of recent statistics it might be anticipated that the picture will become actually worse before it gets better. Also it is anticipated that the incidence in women will approximate that in men.

Through the medium of lung homotransplantation emphysema and other degenerative diseases will be to a significant extent ameliorated. Obviously in this situation as for example with coronary artery disease the ultimate correction of the difficulty is not with surgery, or medical therapy, but in preventative medicine, or public health measures.

Within the next 50 years, the etiologies of the various shock categories will be clarified with subsequent improvement in therapy.

The clinical role of hyperbaric oxygenation will be fully established. Furthermore, hospitals will have OHP Wards precisely as they have today Intensive Therapy Units and Recovery Rooms.

Pump oxygenator systems will be further perfected, particularly with view toward the developing of portable miniature disposable

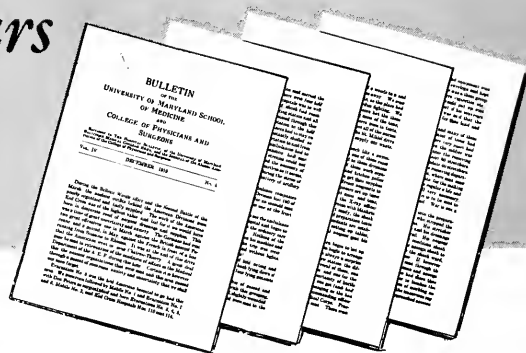
units such that one will be employed for each individual case and then discarded.

Bioelectronics and Bioengineering: The most significant advances will be made in the area, carrying with it possibly the greatest potential threat to conventional management clinical medicine as it is understood today. Within the next half century, it is fully anticipated that the management of a patient in a hospital from admission through the necessary diagnosis and therapy will be semi- or even fully-automated. The medium for the diagnosis, of course, would be through computers. The development of this will progress to a point such that the computers not only will establish the correct diagnosis, but on the basis of this will present the altered physiologic and biochemical picture resulting from the disease process, and furthermore will dictate the appropriate therapy. It is not to be construed that machinery will replace the human mind. What really is meant is that the human mind must progress above and beyond the level of diagnosis and treatment currently existing. The release from routine diagnosis and therapy of the common everyday problems will permit more time for creative thinking and development, both for existing problems and for the likely new disease problems which will arise, as many of those which constitute difficulties today will be solved.

EMIL BLAIR, M.D.

Assistant Professor of Surgery

Pages from the Bulletin of yesteryears



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UNIVERSITY OF MARYLAND

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JULY, 1936

No. 1

THE NEW UNITED STATES PHARMACOPOEIA

JOHN C. KRANTZ, JR., Ph.D.¹

BALTIMORE, MARYLAND

The Eleventh Revision of the United States Pharmacopoeia was released for national distribution December 16, 1935. It became official on June 1, 1936. It has been approximately ten years since the U. S. P. X which it supersedes was released. One hundred and fifteen years have elapsed since Dr. Lyman Spalding presented our national pharmacopoeia to the medical and pharmaceutical professions. Dr. Spalding had the wisdom and foresight to recognize that the embryonic pharmacopoeia of 1820 would soon become antiquated, owing to the continuous advancement of science. He, therefore, made provision for the decennial revision of the pharmacopoeia of the then-new republic and thus conferred upon our national standard for drugs that ever-cherished characteristic of perpetual youth.

The U. S. P. XI contains 568 titles of which 430 have approved therapeutic usefulness. It is, however, very natural that many of these substances should possess similar therapeutic action. Thus, there are various alkali bromides, barbiturates of similar structure and a large number of iron salts among these titles, which to the therapist are really only different forms of the same medicament. The other official substances are classified under the general heading of pharmaceutical necessities. These are substances which do not possess therapeutic merit themselves, but are used in the manufacture and standardization of other products. Thus, distilled water, glycerin, sugar and vanilla would be included in this category. In the official titles, there are 131 pharmaceutical formulas or approximately 30 per cent of the substances recognized. This indicates a definite trend which was begun in the preceding revision and realized a greater fulfillment in the present volume, namely, to make the Pharmacopoeia a book establishing standards for simple therapeutic substances rather than a formulary for polypharmaceuticals.

Department of Pharmacology, School of Medicine, University of Maryland.

¹ Chairman of the Subcommittee on Inorganic Chemicals U. S. P. XI.

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And then came the avalanche of new drugs. The Pharmacopoeia of 1936, indeed, seems remote, limited, and to some, quaint. And all of this in just 30 years!

DELETIONS AND ADMISSIONS

The important problem of the Subcommittee on Scope of the Revision Committee of the Pharmacopoeia is to delete from the covers of the book those drugs and preparations which have outlived their usefulness during the preceding decade. Then of equal importance is the task of the committee to make official certain of the formidable array of medicaments introduced into therapeutics during the decade, those, which have, after adequate trial, met general clinical approbation. Accordingly some of the older practitioners will find many preparations long considered their old friends, omitted from the Eleventh Revision. Among the deletions are the familiar preparations: Infusion of Digitalis, Lime Liniment, Solution of Ferric and Ammonium Acetate, Pills of Phosphorus and Ammoniated Tincture of Valerian. A few comments regarding the decisions of the Committee in respect to these preparations might be considered appropriate. The active principles of digitalis are present in the tincture and naturally, the powdered leaf, which is ever gaining popularity, represents total digitalis activity, hence the necessity for the unstable infusion, which possesses no virtue not found in the powdered leaf is past. Solution of Ferric and Ammonium Acetate used as a hematinic and diuretic for years has been deleted, based on the fact that the iron concentration is insufficient for the treatment of secondary anemia and the ammonium acetate has been shown to be inferior to other salts such as potassium nitrate in the treatment of hydremic nephritis. The tonic and aphrodisiac properties of pills containing phosphorus are believed to rest on an insecure basis. The use of Lime Liniment, Carron Oil, in burns has been supplanted by the use of tannic acid solutions, picric acid and certain local anesthetics of the insoluble type. The deletion of Ammoniated Tincture of Valerian is not surprising, the unusual feature is that this practically worthless preparation has been retained so long. The rationale upon which its use was based rests on a false premise.

Among the interesting substances admitted to the 11th Revision are: Ethylene, Carbon Dioxide, Ephedrine Sulfate, Liver Extract, Histamine Phosphate, Irradiated Ergosterol, Parathyroid Solution, Stomach, Theophylline with Ethylene Diamine, and Tryparsamide. The list of biologicals has been greatly strengthened by the admission of such titles as Diphtheria

Toxoid, Diphtheria Toxin for the Shick Test, Old Tuberculin, Rabies Vaccine and Bacterial Vaccine made from the Typhoid Bacillus. These substances are so well ensconced in the physician's armamentarium that no word of explanation is necessary as to why the Pharmacopoeia should establish standards for these medicaments. A cursory review of the titles admitted reveals the absence of insulin. Its omission requires comment. The patent rights on the extraction of insulin from the pancreas of animals are held by the University of Toronto. This group of workers in cooperation with the Revision Committee recommended that insulin be not admitted to a foreign pharmacopoeia (it is official in the British Pharmacopoeia of 1932) until the patent rights on the process expire.

NOMENCLATURE

Our new Pharmacopoeia retains the old Latin nomenclature, many very interesting changes in official titles have been introduced by the Subcommittee on Nomenclature. Several of the changes important to the prescribing physician are recorded:

U.S.P. X

Amidopyrine
Glusidum
Liquor Pituitarii
Mistura Glycyrrhizae Compositus
Pulvis Glycyrrhizae Compositus
Caffeinae Sodio-Benzoeas
Liquor Hydrogenii Dioxidi
Oleum Cadinum

U.S.P. XI

Aminopyrine
Saccharinum
Liquor Pituitarii Posterii
Mistura Opii et Glycyrrhizae Composita
Pulvis Sennae Compositus
Caffeina cum Sodii Benzoate
Liquor Hydrogenii Peroxidi
Pix Juniperi

In all official titles the spelling of the word "sulphate" has been changed to "sulfate."

VITAMINS AND ANTI ANEMIA PRODUCTS

One of the special features of the machinery of revision of the new Pharmacopoeia is the establishment of advisory boards for the standardization of Vitamin and Anti-Anemia preparations. The Vitamin Board has among its

members, Dr. Sherman of Columbia University, Dr. E. M. Nelson, Director of the Vitamin Laboratory of the United States Government, and the late Dr. Lafayette Mendel of Yale University. The vitamin A and D standards adopted by the board and announced officially by "Interim Revision" have already been generally accepted in this country. The "U.S.P. Reference Cod Liver Oil" of known vitamin potency is being distributed throughout the world through the cooperation of the Vitamin Committee of the Health Organization of the League of Nations. The Vitamin Board is now conducting a series of studies on vitamin B₁ assay methods in which 26 laboratories in this country and abroad are cooperating.

The Anti-Anemia Products Advisory Board consists of Doctors Minot and Castle of Harvard Medical School, Dr. Isaacs, Director of the Simpson Institute of Ann Arbor, Dr. Palmer of the Medical Center of New York City with Dr. C. W. Edmunds, Professor of Pharmacology in the University of Michigan, as chairman. This board will indicate those liver and stomach preparations which are of Pharmacopoeial quality as determined by submitted clinical data. This is entirely a new service for the medical profession which the Pharmacopoeia is undertaking.

DIGITALIS

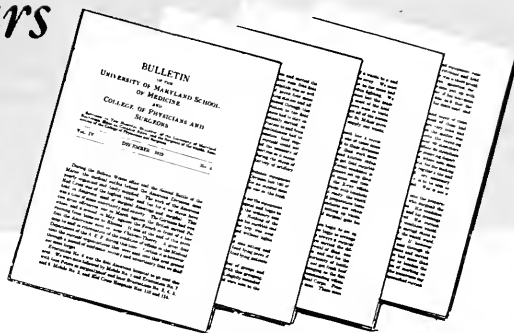
The new Pharmacopoeia recognizes still the

whole or ground digitalis leaf for the purpose of preparing the tincture or other preparations of digitalis. Whenever digitalis is prescribed the pharmacist is directed to supply only "Standard Powdered Digitalis." One-tenth gram of this standard powder is to possess an activity equivalent to not less than 1 and not more than 1.1 U.S.P. Digitalis Units. Likewise, the U. S. P. XI Tincture of Digitalis is to have an activity such that 1 cc. shall be equivalent to not less than 1 and not more than 1.1 U. S. P. Units which accordingly is one-tenth the strength of the Standardized Powder. Incidentally, the new U. S. P. Powder and Tincture of Digitalis will be approximately 25 per cent more potent than required in the U. S. P. X.

The one hour frog method of the U. S. P. X has been continued as the method for assay and subsequent standardization of digitalis and its preparations.

The medical and pharmaceutical professions of the United States may justly pride themselves in the Pharmacopoeia of 1936. It is abreast of scientific progress, its mechanism of revision and interim revision establishes it as a dynamic and not a static standard and most of its official drugs possess conceded therapeutic usefulness. The prescriber will do well to scrutinize carefully these official products, accepted in the treatment of disease, rather than recklessly to launch out in the hazardous water of proprietary medication.

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE

UNIVERSITY OF MARYLAND

Vol. 21

OCTOBER, 1936

No. 2

A BRIEF SKETCH OF THE MEDICAL SCHOOL OF THE UNIVERSITY OF MARYLAND 1807-1920

RANDOLPH WINSLOW, M.D.

BALTIMORE, MD.

The Medical School of the University of Maryland has experienced many vicissitudes and has overcome many obstacles. It was chartered by the Legislature as the College of Medicine of Maryland on December 18, 1807, and was the fifth institution for the teaching of medicine to be established in the United States; all of which are in operation at this time. The Medical School was the direct offspring of the private class of Dr. John B. Davidge and Dr. James Cocke, who conducted courses in some of the branches of medicine from 1802 to 1807. The charter was granted to six gentlemen, three of whom were graduates of reputable medical colleges and three had no medical degrees. When their names were announced to the Legislature, a certain legislator said he saw no reason why those who did not have a medical degree should not be made Doctors of Medicine, as were the others, and they were accordingly granted the medical degree by the Legislature. However, two of these new doctors almost immediately resigned and the third one soon died.

The first organized faculty consisted of John B. Davidge, M.D. and James Cocke, M.D., joint Professors of Anatomy, Surgery and Physiology; Nathaniel Potter, M.D., Professor of the Theory and Practice of Medicine; John Shaw, M.D., Professor of Chemistry, and Samuel Baker, M.D., Professor of Materia Medica. Dr. Shaw died a year later, and Dr. Elisha DeButts was elected Professor of Chemistry in his place.

The school as thus started was without money, buildings or apparatus, and the instruction was given chiefly at the homes of the professors. The first class numbered seven students. While it is

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Baltimore, Md.

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*Dr. Randolph Winslow, then an
emeritus Professor of Surgery,
contributed this interesting paper
on the past of the School of
Medicine.*

possible that 5 men were graduated in 1810 and 10 in 1811, there is no record of their graduation and the first graduate of whom we have definite knowledge is Corbin Amos, whose diploma, issued on May 4, 1812, now hangs in the University Building. This diploma, granted by the Collegium Medicinæ Terræ Mariæ, is in Latin. It is signed by Charles A. Warfield, M.D., President, and by the Professors of the institution, John B. Davidge, James Cocke, Elisha DeButts, Nathaniel Potter and Samuel Baker. Dr. Charles A. Warfield will be remembered as the leader of the party that burned the ship Peggy Stewart, in Annapolis harbor at the beginning of the Revolution. He died in 1813.

The Medical and Chirurgical Faculty of Maryland was chartered in 1799 and when the College of Medicine was organized, it was ordered that "That the Members of the Medical Examiners for this State for the time being, together with the President and Professors of the said College, and their successors, shall be and are hereby declared to be one community, corporation and body politic, to have continuance forever by the name of the Regents of the College of Medicine" and "That the Medical and Chirurgical Faculty of Maryland shall be considered as the patrons and visitors of the said College, their President for the time being, shall be Chancellor of the College; and the medical faculty of the said College shall give into the said Medical and Chirurgical Faculty, at each of their biennial meetings a report of the progress of learning in said College and of such other particulars as they may think fit to communicate." This oversight of the College continued for a time but with the establishment of the University of Maryland the connection of the two corporations ceased to exist.

The authority to practise in the State, however, was vested in the Medical and Chirurgical Faculty and we are fortunate to have several certificates granted by the examining board of this body. These certificates also are in Latin. The oldest of these reads *Perquisitores a Collegio Medicorum in Civitate Marylandiæ* and was bestowed upon Charles Duvall on June 7, 1807, the liberty of America the 31st and the institution of the College of the 9th. It is signed by Charles Alexander Warfield, F.A.M.S. and by the *Perquisitores*, *Districtus occidentalis*, George Brown, M.D., John B. Davidge, M.D., John Crawford, M.D., Wm. Birkhead, M.B., John Shaw, A.M., Nathaniel Potter, M.D., P. Thomas, *Præses*, and Nathaniel Potter, *Scriba*.

In 1812, the Medical School was ordered to annex Faculties of Law, of Theology and of Arts and Sciences and thus to form an institution to be known as the University of Maryland. The diploma was altered to read *Academia Terræ Mariæ* but in other respects remained the same as that of the College of Medicine. On May 1, 1815 this diploma was issued to Charles S. O'Davis and we are fortunate to have this—one of the earliest diplomas of the University of Maryland—in the Dean's office. This diploma is signed by R. Smith, Provost and by Nathaniel Potter, John B. Davidge, Samuel Baker, Richard Wilmot Hall, Elisha DeButts, William Gibson and Maxwell McDowell, professors. Robert Smith, Provost, was a very distinguished man, having served as Secretary of the Navy, Attorney General and Secretary of State. In 1819, William Gibson was called to Philadelphia to fill the chair of surgery in the University of Pennsylvania, which he occupied with great distinction for the next 35 years.

The ground on which the main University Building is situated was sold to the Medical School by Colonel John Eager Howard, the distinguished Revolutionary soldier. The foundation stone was laid on April 7, 1811 and the building was sufficiently finished in 1812 to permit lectures to be held in it.

Dr. Cocke was to have delivered the introductory address but on the very day and hour at which he was to have spoken, the 25th of October, 1813, he died of "fever." With, perhaps, the finest college building in the United States, the Medical School began to achieve great popularity and in 1825, the class is said to have consisted of 320 students.

Several names of this period deserve to be mentioned. Dr. Horatio G. Jameson, a graduate of the class of 1813, was a surgeon of extraordinary ability. He desired to be appointed to a chair in the University, but failing to get this appointment, he founded, in 1827, the Washington Medical College, which continued to give instruction until 1851, when it closed but was reorganized in 1867 and was for a time a rival of the University. It was eventually absorbed by the College of Physicians and Surgeons, which in 1915 was merged with the University.

Dr. John D. Godman, class of 1818, became one of the most distinguished scholars of his day, as an anatomist, a lecturer, an author and a naturalist. While Godman was still a student, Dr. Davidge broke his leg and was compelled to

discontinue his lectures for several weeks. During his incapacitation, the Faculty appointed Mr. Godman to continue the course in anatomy, which he did with such success that the students were sorry when the professor was able to resume the duties of his chair. Mr. Godman after being graduated, sought for a while to practise his profession. He also hoped to secure a chair in the University on the removal of Dr. Gibson to Philadelphia, but was judged to be too young to be admitted into the Faculty. Being greatly disappointed, he removed to Philadelphia where he held private classes in anatomy and devoted his attention to natural history. He married Angelica Peale, a daughter of Rembrandt Peale, the artist, and died at the early age of 35 years. A grandson of the same name lived recently in Florida.

In 1825, there was a dissension in the Faculty and certain parties were able to influence the Legislature to abolish the Regents and to place the institution under a board of Trustees. This action was greatly resented by the Faculty but it went into effect and the professors were obliged to petition the Trustees for appointment to their own chairs. The state of affairs continued with ever increasing friction until 1837, when the Faculty resigned, the Board of Regents was reestablished and two distinct faculties were in existence.

We have two diplomas granted by the Trustees, one issued on April 2nd, 1832 to Theodore Jenkins, which is signed by

Nathaniel Williams, V. P.	} Executive Committee
Richard B. Magruder	
William Frick	
Solomon Etting	
and R. B. Taney, Provost.	

also by	} Professors
Nathaniel Potter	
Samuel Baker	
Richard Wilmot Hall	
Maxwell McDowell	
Nathan R. Smith	
J. T. Ducatel	}
E. Geddings	

When the original Faculty withdrew it became necessary for the Trustees to form a new board of teachers, which, it is said, was attended with difficulty. However, a new faculty was organized which was continued until the Court of Appeals determined that the Legislature had no authority to change the management of the Uni-

versity and the School was returned to the Regents. We are fortunate to have in our possession one of the last diplomas issued by the Trustees, awarded to Humphrey G. Bowman on March 2, 1839. This is signed by

Nathaniel Williams, V.P.	} Executive committee
Solomon Etting	
James W. McCulloh	

also by

H. Willis Baxley, M.D., Anat. and Phys. Prof.
H. Howard, M.D., Obstetrics Prof.
M. J. Finley, M.D., Pathol. and Prax. Prof.
R. E. Dorsey, M.D., Materia Med. Prof.
Wm. R. Fisher, M.D., Therapeutics and Pharm. Prof.
J. Frederick May, M.D., Chirurg. Prof.

Of these Drs. Baxley and Fisher were residents of Baltimore City. Dr. Howard was from Montgomery County. Dr. Finley was from Washington County. Dr. May resided in Washington City. Dr. Dorsey was a resident of Baltimore County.

The Regents declared that these men were incompetent and cast unpleasant and unjust reflections upon them but as most of them subsequently were called to other colleges it is evident that they were both competent and meritorious.

Thus ended the rift in the management of the University.

The Medical School again became prosperous, its Faculty was composed of distinguished men, but the Civil War drew on apace and evil days again overtook the School. Dr. Wm. A. Hammond, Professor of Anatomy and Physiology, who had been a surgeon in the United States Army and who had accepted the chair in 1860, resigned on the outbreak of war and in 1862 was made Surgeon-General of the United States Army. He originated the Army Medical Library and the Army Medical Museum, which are now world famous. Dr. Edward Warren, Professor of Materia Medica and Therapeutics, had served one session only when he also left the city and joined the Confederate service. He became Surgeon-General of North Carolina and Medical Inspector of the Army of Northern Virginia. Not being able to regain his chair in the University on the cessation of hostilities, he resuscitated the Washington University Medical School, but after some years he resigned his chair in this school and founded the College of Physicians and Surgeons. He served only 1

year in the latter school, when he resigned and accepted an appointment as Surgeon-in-Chief of the Egyptian Army. He was afflicted with ophthalmia while in Egypt and went to Paris for treatment, where he resided during the rest of his life.

As many of the students of the Medical School came from the South, and as many of the young men of the State joined the Confederate Army, the classes were decidedly smaller during the war, but the courses were continued without interruption; in fact there has been no cessation of instruction since the institution was founded.

The most outstanding figure in the history of the University is Nathan Ryno Smith, who filled the chair of Surgery from 1827 to 1869 and to whom the soubriquet of "The Emperor" was applied. He was not only the ruler of the Medical School but was also the highest medical authority in the city and State. His anterior splint for the treatment of fractures of the femur was extensively used and it was found particularly efficacious in gunshot fractures of this bone during the Civil War. He also devised an instrument for the operation of lithotomy, which so simplified the procedure as to render it both easy and safe.

It is impossible to mention in this hasty sketch many of the eminent men who had chairs in the Faculty, but it will not be amiss to note 2 young men of the highest attainments whose useful careers were cut short by untimely deaths. Dr. Charles Frick, who had already achieved distinction as an investigator and author, was elected Professor of *Materia Medica* in 1858. He completed only 2 courses of lectures, when he was stricken with diphtheria of which he died on March 25, 1860. He contracted the disease from an indigent patient who was having difficulty in breathing and whom he attempted to relieve by applying his mouth to the patient's tracheal wound. In this effort to dislodge the membranes by sucking them out, his own larynx became affected and he died notwithstanding a tracheotomy performed by his colleague, Dr. George W. Miltenberger. He was only 37 years of age.

Another lamentable death deprived the school and the profession of the services of Dr. William Power, Professor of the Theory and Practice of Medicine. He had graduated in 1835 at the University and then went to Paris where he studied under Louis, Chomel, Andral and others and where he became proficient in the physical examination of diseases of the chest. On his return

he attracted favorable notice and in 1846 was appointed Professor of the Theory and Practice of Medicine. It is said that he was the first physician in Baltimore to become skilled in the physical examination of the chest. He was an enthusiastic and admirable teacher, but he also had only a short span of life dying of tuberculosis on August 15, 1852 in his 39th year.

In 1868, the Washington University Medical School was resurrected and students were admitted on easy terms and in 1872 the College of Physicians and Surgeons was founded, and they naturally affected the number of students at the University, so that during the next 10 years the classes were greatly reduced in size. It was during this time that the writer graduated and his graduating class numbered 46; of whom 3 became professors in the University and 1 in the College of Physicians and Surgeons.

Shortly after the close of the Civil War several gentlemen from the South were elected professors, who were great assets to the School; of these Dr. Julian J. Chisolm was made Professor of Diseases of the Eye and Ear, and Dr. Francis T. Miles was the gifted Professor of Anatomy and Clinical Professor of Nervous Diseases. These men were from Charleston, S. C. Dr. William T. Howard, Professor of Diseases of Women and Children, who came from North Carolina was a man of prodigious memory and of great experience.

Dr. George W. Miltenberger, who was Professor of Obstetrics, was the leading physician in the city and Dr. Samuel C. Chew, Professor of *Materia Medica* and Therapeutics, was a scholarly man who subsequently became Professor of Medicine and retired in 1909. He was twice president of the Medical and Chirurgical Faculty of Maryland. Dr. Richard McSherry was at this period the Professor of Medicine. He had been a surgeon in the army during the Mexican War and was a much esteemed physician. Dr. Frank Donaldson was Professor of Physiology and was the great authority on diseases of the chest in the city.

Dr. William E. A. Aiken was Professor of Chemistry. He was elected in 1837 and retired in 1883. He was doubtless a learned chemist but in the period of which I am writing he was deaf, his speech was indistinct and his lectures were not instructive. He was married twice and is said to have had 14 children by each wife. Dr. Christopher Johnston, who was Professor of Surgery, was a learned man who had had an extensive training abroad. He was a good surgeon

but not a very entertaining lecturer, though his quaint expressions and his witty remarks were enjoyed by some of the better educated students.

I received my diploma from the hands of the Hon. Severn Teackle Wallis, LL.D., Provost of the University, who was not only a distinguished lawyer but an author of delightful books, and the possessor of a tongue which gave forth words of pleasant humor or of scathing criticism as the occasion suggested. Nineteen years later it was my good fortune to sit with him at meetings of the Board of Regents.

It may not be inappropriate at this point to note that the Baltimore Infirmary situated on the southwest corner of Greene and Lombard Streets had been erected by the Faculty in 1823 and was perhaps the first hospital in this country to be owned by a medical school. It was subsequently increased in size by the addition of the clinical amphitheatre, which was built by means of a legacy bequeathed by Mr. George Gray in recognition of the care he received while a patient in the Infirmary in 1829. In 1876 or 77, the long Greene Street wards were erected, thereby greatly increasing the capacity of the hospital. About this time the institution assumed the name of the University Hospital. For 20 years, there was but little change in the general characteristics of the hospital but the building was becoming more and more antiquated and inappropriate for modern times.

On February 6, 1896, I introduced the following resolution at a meeting of the Faculty, "That a committee of 3 members of the Faculty be appointed by the Chair, whose duty it shall be to investigate as to the possibility and the method of erection of a new Hospital and report to the Faculty upon the subject as soon as possible."

The President appointed the Dean (Prof. Coale) and Professors Atkinson and Winslow, who finally secured the means and awarded the contract for the building to Edgar M. Noel, a prominent constructor. The hospital was re-erected as the first operation was performed in September, 1897, by Prof. J. Holmes Smith. Many improvements were made in the course of years but the institution finally outlived its usefulness and it was judged necessary to erect a much larger and more commodious hospital, the magnificent 10 story building now in use, which was dedicated on December 15, 1934. The previous hospital building is now being used as a dispensary and for some of the laboratories which require more space.

I have mentioned the Faculty of 1873, who

were my teachers, but changes gradually took place and others filled their chairs. Dr. J. Edwin Michael, a large, handsome man, of fine education and a charming manner, was made Professor of Anatomy and on the resignation of Dr. George W. Miltenberger succeeded to the chair of Obstetrics and Dr. Randolph Winslow was elected Professor of Anatomy and Clinical Surgery. Dr. Louis McLane Tiffany filled the chair of Surgery and was one of the outstanding surgeons of the country. Dr. Isaac E. Atkinson, a learned man and an enthusiastic teacher, was made Professor of Materia Medica and Therapeutics. Dr. L. Ernest Neale, a most capable obstetrician and an excellent teacher, was called to the chair of Obstetrics upon the death of Dr. Michael. He is especially to be remembered as the organizer of the splendid obstetrical clinic which is now in existence. Dr. Charles W. Mitchell, a very brilliant man and eloquent teacher, was Professor of Diseases of Children and for several years he held the chair of Medicine also. Dr. Thomas A. Ashby succeeded Dr. William T. Howard as Professor of Diseases of Women and was a most useful member of the Faculty. He was a genial and friendly man who was loved by everyone. Dr. J. Holmes Smith, who was elected Professor of Anatomy in 1902, was an accomplished teacher of anatomy and a lover of nature. In the same year, the writer was made Professor of Surgery, upon the retirement of Dr. Tiffany. The greatly revered Professor Samuel C. Chew died in 1915, having occupied professional chairs in the school for 45 years.

The centennial of the organization of the University occurred in 1907. A magnificent celebration was held, at which many distinguished men took part. Up to this time the Medical School was an unendowed institution but Dr. Eugene Fauntleroy Cordell undertook to raise an endowment fund, which now has reached respectable proportions. I may say, incidentally, that I was the first one to make a donation to this fund; and the last legacy supposed to be \$1,000,000.00 or more, bequeathed by the late Dr. Frank C. Bressler, is I hope the harbinger of many more substantial bequests. Dr. Cordell was Professor of the History of Medicine and was librarian of the Medical School library, which he was instrumental in building up. He was a distinguished medical historian. His history of the University of Maryland and his Medical Annals of Maryland will be consulted by all those desirous of knowing the development of medical teaching and practice in this State.

He died suddenly in 1913. Two others of this period should be mentioned: Dr. Frank Martin, who was an outstanding surgeon, and Dr. J. Mason Hundley, who was equally distinguished as a gynecologist and abdominal surgeon. I find I have neglected to mention Dr. John C. Hemmeter, who was elected Professor of Physiology upon the resignation of Dr. Francis T. Miles, and subsequently Professor of Gastro-Enterology. He was an industrious investigator and a well known author of works on diseases of the stomach and intestines.

In 1913, an effort was made to consolidate several of the medical schools of this city into one body and the Baltimore Medical College united with the University and ceased to exist as a separate school. In 1915 the College of Physicians and Surgeons also ceased to exist as an independent institution and joined forces with the University. In the meanwhile several of the smaller medical colleges in Baltimore were closed so that in 1915 only 2 medical schools remained in the city, viz.: The Johns Hopkins and the University of Maryland.

In 1917 the United States declared war against Germany. Our students and our teachers went into the military services leaving only those who were incapacitated in some way to conduct the school. In fact most of the students were potential soldiers and their fees were paid by the Government. Base Hospital No. 42 was sent out by the University under the command of Professor Archibald C. Harrison and rendered meritorious service in France.

For 13 years an agreement with St. John's College at Annapolis gave the University an undergraduate department but in 1920 this affiliation was discontinued. In its place an integral union was effected with the Maryland College of Agriculture situated at College Park, Maryland, and the combined institution was chartered by the Legislature and became the University of Maryland, a state university, owned by the State of Maryland and not a semi-private corporation as it was formerly. Since then the schools in Baltimore have enormously increased both in students and equipment and the undergraduate department at College Park has been developed into a large and handsome university foundation.

In the autumn of 1920, the writer retired from active participation in the affairs of the University and was made Professor Emeritus of Surgery and hence will close his short sketch at this point; but he may say that during the past

15 years the State has made possible great improvements in both the educational and the physical conditions of all the Baltimore schools as well as of the undergraduate departments at College Park.

On June 4, 1936, the School of Medicine celebrated its 129th Anniversary. At the pre-commencement exercises that year, President H. C. (Curly) Byrd addressing the Alumni made a plea for limited enrollment in the the School, suggesting that the professions were overcrowded. In part, President Byrd said —“there is no excuse for educating at great cost, more men for highly specialized fields than can be absorbed in these groups.

“Education for the American people is too costly, largely because nearly every university seems to wish to teach everything that every other university teaches. In the specialized fields, this resulting not only in unusually high costs but also in the overcrowding of these fields.— Certainly it must be accepted that we should not turn out more doctors, more pharmacists, more lawyers, more engineers, more chemists than can be absorbed in these professions.— Last year we reduced our entering class from 120 to 95 and next year we expect to reduce this 95 to 85.—”

A mere 30 years,—and how the picture has changed!

PRESIDENT BYRD URGES LIMITED ENROLLMENT: SEES PROFESSIONS AS OVERCROWDED

Drastic restrictions in the number of students admitted to college graduate schools were proposed in his address by President Byrd, because there is no excuse for educating, at a great cost, more men for highly specialized fields than can be absorbed in those groups.

Education for the American people, Mr. Byrd continued, is too costly, largely because nearly every university seems to wish to teach everything that every other university teaches. In the

specialized fields, this is resulting not only in unusually high costs, but also in the overcrowding of these fields.

It is coming to be a very serious question as to how this problem can be met. Certainly it must be accepted that we should not turn out more doctors, more pharmacists, more lawyers, more engineers, more chemists than can be absorbed in these professions.

We should labor diligently to provide every possible opportunity for the education and enlightenment of our general citizenship, but no excuse can be found for educating at great cost more men for highly specialized fields than can be absorbed in these groups.

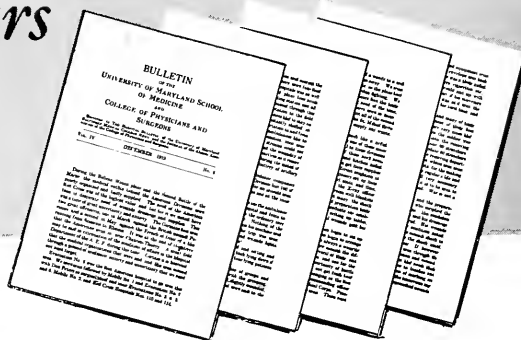
As far as our medical school is concerned, continued Mr. Byrd, we are tightening up our entrance requirements with a view to graduating fewer but more rigidly selected men. Last year we reduced our entering class from 120 to 95 and next year we expect to reduce this 95 to 85. Last week we raised the entrance requirements from two years of college work to three years.

But, above this, we must establish what, in a measure, will be a new standard for the men who apply for education in the field of medicine; a standard which will not accept a certificate of education as the sole, or main, criterion of qualification. The educational qualification will become a secondary consideration, and the first consideration will be to determine whether or not the applicant has the background, the character, the moral courage, such as we feel are requisite for a doctor.

We should ask just 2 questions of every applicant for admission to the medical school, Mr. Byrd said. First: Is he the kind of man we would want to come into our families to administer the most serious and intimate services for our wives and daughters and children? Second: Does he have such mental qualification as would indicate he can successfully master the rigorous educational training through which he must pass to attain a degree in medicine?

The class of 1921, with 30 of its 70 members attending, was the largest alumni group present.

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE UNIVERSITY OF MARYLAND

Vol. 21

JANUARY, 1937

No. 3

MEMOIR OF DR. ALEXANDER CREVER ABBOTT¹

WILLIAM PEPPER, M.D.

Alexander Crever Abbott was born in Baltimore, Maryland, on February 26, 1860. He attended Baltimore City College but after three years, not liking his school work, he left and in the spring of 1877, apprenticed himself as a machinist's apprentice in the Baltimore and Ohio Railroad shops in Baltimore. The contract was for four years; the hours 7 A.M. to 6 P.M.; the pay 70 cents a day the first year, increasing to a dollar a day the fourth year. At the termination of his apprenticeship, he received a bounty of seven and one-third cents for every day worked, in a lump sum. He did not like the work but, nevertheless, he finished his four years as an apprentice. He had helped build and repair many locomotives and knew them inside and out. He says in his reminiscences that when he finished and drew his bounty it was like "awakening from a horrible nightmare." I cannot help but believe that this early experience had a valuable influence on Dr. Abbott's later development.

His reminiscences are in two bulky volumes, one labeled "Civil" and the other "My War Diary." These have been of great help to me in writing this memoir.

When he left the shops he knew not what to do; he was not prepared for business or a profession. It so happened that at the time his mother was ill, and the family physician, Dr. G. Glanville Rusk, suggested that if the boy would like to study medicine, he would take him as his office student, send him to the University until he got his degree, and pay all his expenses. I think, therefore, Dr. Rusk deserves our mention. Young Abbott studied all summer under his generous preceptor, drove the doctor's carriage and did various odd jobs, and in the fall of 1881 entered the University of Maryland School of Medicine from which he graduated in 1884, having decided

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An interesting account of one of the many Alumni of the School of Medicine who played important roles in the development of the Johns Hopkins Hospital and its School of Medicine.

to spend 3 years in school instead of the 2 years in which a man could then complete the medical course. Dr. Abbott graduated second in his class with an average of 98.5, the late Dr. Charles P. Noble, a fellow of this College, being first with 98.8. Again Dr. Rusk had a suggestion to make, this time that the young doctor enroll in a course on pathology about to be offered by a Dr. Councilman at Johns Hopkins University. This Dr. Abbott did, and on its completion Dr. Councilman appointed him as an Assistant without pay. Then Major Sternberg, later the Surgeon General, having a grant to study commercial disinfectants wanted an assistant, and Dr. Councilman recommended that Dr. Abbott accept the position and thus learn something about bacteriology. This position paid \$50 a month. As Dr. William H. Welch was soon to return from Europe and had shipped equipment for his laboratory to be opened in the Hospital, Dr. Abbott was kept busy in preparing the laboratory. Dr. Welch arrived, courses were organized, and Dr. Abbott was made an Assistant in Bacteriology. In 1886, Dr. Welch suggested a career in Public Health to the young assistant, and Dr. Abbott, taking his advice, went to von Pettenkofer's laboratory in Munich for a year and a half and spent a winter in Koch's laboratory in Berlin. In 1889, the Johns Hopkins Hospital was about to be opened, and Dr. Hurd, needing a resident Sanitarian in the Hospital, offered Dr. Abbott a room, board and washing and \$50 a month. Dr. Welch also had him appointed an Assistant in Bacteriology and Hygiene in the fall of 1889. Then began, judging from the reminiscences, a very happy experience for Dr. Abbott. When Koch announced the discovery of tuberculin as a possible cure and preventive of tuberculosis, Dr. Abbott was sent to Berlin to learn what he could about it. Most of the passengers on the steamer were physicians on the same mission. Berlin newspapers stated that there were in the city five thousand foreign physicians from all over the world. Dr. Abbott had an interview with Koch, got a promise that a supply of tuberculin would be sent to the Johns Hopkins Hospital, saw some cases treated with the new remedy and then returned to Baltimore. His report was published in the *Johns Hopkins Bulletin*. He helped in the early work on malaria, after Laveran's discovery, with Sternberg, Councilman and Osler. In the reminiscences are many references to these wonderful days, friendships with that extraordinary group of men assembled at Johns Hopkins University

at the time the Hospital was built and the Medical School organized. The scientific atmosphere was stimulating. The workers seem to have formed a very happy family. There was good companionship and good cheer. Dr. Abbott as President of the Johns Hopkins Residents Association figured largely in these good times.

In 1890, Dr. Abbott was called to the University of Pennsylvania and was told to go to Europe to purchase equipment for the proposed new Laboratory of Hygiene which was to be erected. He left Johns Hopkins and went abroad. He had met while in Baltimore Miss Georgina Picton Osler, who had left her home in Toronto to keep house for her uncle, Dr. William Osler. The reminiscences tell that while Dr. Abbott was abroad, purchasing supplies for the Hygiene Laboratory, Miss Osler was travelling in Europe, and that they met again over there and became engaged. In Toronto in August, 1892, they were married. Dr. and Mrs. Abbott had 3 children, a daughter and 2 sons; 1 of whom, William Osler Abbott, is a Fellow of this College.

When Dr. Abbott first came to Philadelphia he lived in the Hygiene Laboratory and was first Assistant to Dr. Billings who was Director. In 1896 Dr. Abbott succeeded Dr. Billings as Pepper Professor of Hygiene and Director of the Laboratory of Hygiene, and in 1899 his title was changed to Pepper Professor of Hygiene and Bacteriology. In February, 1912, the University conferred the honorary degree of Doctor of Public Health on him, and that spring the degree of Dr.P.H. was conferred on four physicians who had completed this, the first graduate course in Public Health leading to a degree in this country. This degree was conferred on 34 graduates before Dr. Abbott retired. He had been instrumental in originating this course. This was in addition to his work as Professor of Hygiene and Bacteriology, both of which subjects he taught to the medical students.

Dr. Abbott also, besides his University duties, did much for the city of Philadelphia. In 1897 he became Director of the Laboratory of the Board of Health in City Hall and in 1903 was made Chief of the Bureau of Health of Philadelphia. He resigned as Chief in 1909 but remained on the Board until shortly before his death, being President for some years.

Although he seems to have missed his Johns Hopkins friends and the opportunities he had there to do research and although he felt that the University of Pennsylvania was a rather un-

comfortable location for a Johns Hopkins man, which he with some justice considered himself, he soon made many firm friends in Philadelphia. He refers frequently to the delights of "Reichert's Lunch Club" and a few years ago wrote a very amusing account of it for one of the graduating classes at the University. Dr. Reichert in his laboratory was accustomed to prepare each day luncheon for a small group of his colleagues. The original members were Piersol, Marshall, Flexner and Abbott. Later Smith, Pearce and Taylor were frequent attendants. Dr. Abbott refers to this group as "convives." The dictionary states that a convive is "a boon companion; one who is convivial; a guest at table." He himself certainly qualified for such an appellation.

In 1926 Dr. Abbott, who had attended a Wistar Party at Mr. C. C. Harrison's, was waylaid by a couple of thugs who hit him over the head with a blackjack and robbed him; this on 17th St. between Locust and Walnut. Although he suffered a depressed fracture of the skull from this vicious attack, he recovered completely, thus showing the soundness of his constitution, although this had been evidenced by his activities in the Army during the World War.

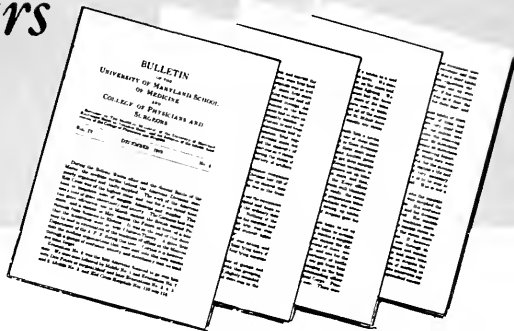
In his early days at Johns Hopkins Dr. Abbott had published several papers on such subjects as Asiatic cholera, membranous rhinitis, and diphtheria, one of which was in collaboration with Dr. Wm. H. Welch. His *Principles of Bacteriology* first appeared in 1892 and went through many editions. He published in 1899 another textbook, *The Hygiene of Transmissible Diseases, their Causation, Modes of Dissemination and Methods of Prevention*.

Dr. Abbott had been commissioned a Lieutenant in the Medical Reserve Corps in 1908 and, with the entrance of the U. S. into the War in 1917, was promoted to Major and ordered to Camp Greenleaf on July 18, 1917. He was at the time 57 years of age. Colonel Page, Commandant of the Camp, was delighted to have Major Abbott assigned to the Camp, on account of his knowledge of hygiene and sanitation. He was soon made Sanitary Officer of the Camp and took a leading part in organizing the Camp Greenleaf School of Military Hygiene, of which he was Director, and he was chosen President of the Greenleaf Medical Society. For a time I "bunked" with him in a small cubicle in one of the barracks and got to know him much better than I probably could have done in any other way. He enjoyed his army life at Camp Greenleaf, I believe, more than any other officer

I met. He was interested, energetic, tireless and always ready for a bit of fun or a harmless practical joke. In September, 1918, he, having tried for some time to get orders for over-seas duty, was finally ordered to Camp Beauregard to command Base Hospital No. 71 then nearly ready to go to France. Through the usual delays his Base Hospital did not embark on a transport until November 10, and it was aboard ship, still at the dock, that he heard the noise of the celebration of the signing of the Armistice on the morning of the eleventh. However, the ship sailed on the 12th, and Dr. Abbott was appointed Surgeon of Troops on the transport. The Base Hospital went to Pau and then to Chartreuse de Vauclaire. Here Dr. Abbott was relieved of his command of the Base Hospital and ordered to Toul to relieve Zinsser, the Sanitary Inspector of the Second Army. In April, 1919, Dr. Abbott was promoted to Colonel and finally got his discharge in May, 1919, upon his return to this country.

Dr. Abbott spent his summers at Waquoit, Mass., on Cape Cod; where he built a house in 1899. In 1910, while indisposed from some slight illness, Mrs. Abbott, thinking to amuse him, gave him paint and brushes, and he became at once greatly interested in painting in oils. He had always had a happy facility with pen and pencil and had even drawn illustrations, which were reproduced in published scientific articles. He was for a time Vice-President of the Philadelphia Sketch Club. In recent years, however, his chief amusement was in his garden at Waquoit, studying seed catalogues all winter and working in the garden in the summer time. In the fall of 1933 Dr. Abbott had an attack of dizziness and aphasia, which shortly cleared up, but with the advent of cold weather in the fall of 1934 he had another and more severe attack and was confined to bed with general weakness of his extremities and difficulty in articulation. This lasted 6 months. This past summer he worked in his garden as usual, but on September 11, a cold day, he carried 3 heavy logs into the house to build a fire and was found shortly afterwards lying dead on the hearth. Thus at the age of 75 years ended a life, filled with interest, accomplishment and many of the things which make life well worth living. He was indeed a boon companion and a convivial spirit, a true "convive." From the time he completed his machinist's apprenticeship until his death, he enjoyed life to the full.

Pages from the Bulletin of yesteryears



A HISTORY OF THE LIBRARY OF THE UNIVERSITY OF MARYLAND,*† 1813-1938

RUTH LEE BRISCOE
BALTIMORE, MD.

"Where have I known it,—that old library,
Dark wainscoted, and book lined, high walled and still,
Where a content book-lover feeds at will
On books half musty with Time's rosemary "

Alice Lawry Gould in *Conjury*

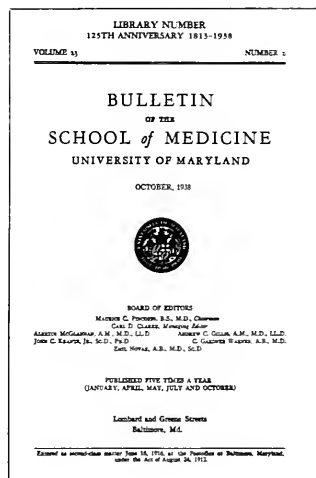
According to Dr. Eugene F. Cordell, the University of Maryland, founded in 1807, was the first medical college in this country to establish a library, which was made possible by the purchase of 300 books from the estate of Dr. John Crawford. This was accomplished by a subscription of \$500.00 by members of the Faculty. The minutes of the Faculty meeting of December 11, 1813 acknowledge the donation from Jeremiah Sullivan, Esq. of the *Encyclopedia Britannica*, the binding to be paid for by him. The Library was opened for the use of students in 1815, when the following account of it was given: "Though not the most extensive of its kind, it is competent to most of the useful purposes of the medical pupil. While it contains many of the most recent works, it presents the curious inquirer with some of the rarest of both ancient and modern times, a few of which (I believe) are not to be found in any of the collections in the country."

In a report of the Faculty to the Board of Regents, dated May 3, 1819, it was stated that the debt due for the buildings and appurtenances, together with the amount expended for apparatus, Library, etc., was about \$15,000.00. In a list of disbursements of the funds of the University contained in the Memorial of the Trustees of the University of Maryland and Trustees of the Baltimore College to the Legislature of Maryland, Baltimore, 1830, \$2600.00 was charged to the account of the Medical Library. The Trustees' records contained a notice of books purchased by the Medical Library in April, 1837. During the regime of the Trustees (1826-1839) a branch was maintained at the Hospital for the use of the attending physicians and students, and an annual appropriation of \$50.00 was made for the purchase of new books.

At the time of the Library's foundation the University marked the outskirts of the City of Baltimore, and from the beautiful portico of the Medical College could be seen the reaches of the brimming Patapsco River. The social and intellectual life of the City clustered

* From the Library of the School of Medicine, University of Maryland.

† Received for publication, August 29, 1938



The Medical Library of the School of Medicine was one of the first such libraries in America. It was the oldest claimed by any American school of medicine, and possessed the (even then) famous Crawford Collection, now a part of the Health-Sciences Library. The beginnings of the library are recounted by a former and devoted medical librarian, Mrs. Ruth Lee Briscoe.

about the University, which is rich in memories of a bygone day. Within a radius of three city blocks from the University of Maryland lie the bodies of many whose names are famous in history and literature. In St. Paul's Cemetery are the remains of Colonel John Eager Howard, the hero of the Battle of Cowpens, and later Governor of Maryland, and of Colonel Tench Tilghman, General Washington's Aide, who carried the news of General Cornwallis' surrender at Yorktown to the Congress which was assembled in Philadelphia, the first news of peace following the American Revolution. Under the same sod lies the body of Cary Long, the architect of the Medical College, who selected the Pantheon in Rome as his model. Nearby in Westminster Churchyard rest the immortal remains of Edgar Allan Poe. In this same hallowed ground is the tomb in sandstone and marble of Dr. John Crawford, the purchase of whose books in 1813 formed the nucleus of the Library.

Dr. Crawford was said by some to be the forerunner of Pasteur in his belief that micro-organisms outside of the body cause disease, and was the first to introduce vaccination in America. Before he came to Baltimore he had held an appointment as Surgeon-Major to the Colony of Demerara in South America under the Dutch Government. This explains the fact that a number of his books were printed in the Dutch language. Many years ago the School of Medicine enrolled a student by the name of Clarence Pridmore Andrews, who had attended the University of South Africa and understood Dutch; he translated the title pages of these books for the Library. Among the books in the Crawford Collection are examples of the book-binding methods of the 17th and 18th centuries. Some are bound in vellum and parchment, others in calf and deerskin, with designs in blind and gold tooling. All of the books in this Collection bear the individual bookplate of Dr. Crawford, a small one of charming simplicity. There is no continuous record of the Collection, only a scant record of it now and then.

In 1890 the Library consisted of about 1,000 volumes, many of the rare ones being stored in the drawers of the museum. In 1891 the number was greatly increased by a gift of 1,200 volumes to the Library by the late Dr. T. Barton Brune, an alumnus. For several years after this the druggist at the Hospital held the position of librarian. In 1903 the University was the recipient of 700 volumes from the library of the

late Dr. Francis T. Miles. During the 3 years from July 1, 1903 to June 1, 1906 nearly 2,680 volumes were added.

In 1903 a Chair for the History of Medicine, a much neglected department in America up to that time, was founded at the University. Dr. Eugene Fauntleroy Cordell was appointed to fill this professorship. Through his efforts an interest in the Medical Library, which had been relegated to dust and neglect, was revived. It was made a member of the American Association of Medical Libraries, a code of rules was drawn up for its government, and books, pictures and journals were collected. As a consequence of this revival the librarian in June, 1906 was able to make a report to the Faculty, showing that the Library contained 6,980 volumes and 4,200 pamphlets. At this date it received regularly 46 journals and had an excellent card index system.

During the early years of the Library's existence and for nearly a century thereafter its collection of books was housed in what later became known as the Provost's office in the medical college building. As time went on various departments were added and mergers with other local medical institutions formed. It became necessary to seek more commodious quarters to accommodate the increasing accessions of books, journals, alumni records and publications. In 1843 the West Baltimore Methodist Protestant Church erected the building on the southeast corner of Lombard and Greene Streets. It was sold in 1880 or 1881 to the Calvary Methodist Episcopal Church, South, who used it until 1905, when the University of Maryland purchased it for a library building. The structure was given the name of Davidge Hall, in honor of Dr. John Beale Davidge, the founder of the University of Maryland.

The Library moved into Davidge Hall in 1913. On February 1, 1911 the Baltimore Law School and the Baltimore University School of Law were consolidated under the name of the Baltimore Law School, and the libraries of these two schools were united. "I do not believe that the Law Library of the Law School of the University of Maryland was ever founded. It just grew by gifts and accumulations of books," said Judge Henry D. Harlan, for many years Dean of the School of Law. "When the Law School moved from Mulberry Street where Liberty Street was cut through to its new buildings at the corner of Lombard and Greene Streets, in January, 1884, whatever books the



FIG. 1. DAVIDGE HALL, LIBRARY OF
THE SCHOOL OF MEDICINE

Law School had were taken to the new building. . . . The Catalog of 1914 announces the merger with the University of Maryland of the Baltimore Law School, which was a consolidation of the Baltimore Law School and the Baltimore University Law School."

Just when the libraries of the Schools of Dentistry and Pharmacy entered into a merger with the Medical Library cannot be stated, as there are no existent records of such transactions. According to Dr. Cordell, the beginning of the Library of the Baltimore College of Dental Surgery is shrouded in uncertainty. The evidence of an early library existed in a very fine antique bookcase. The Dental Library in the Dental Department of the University of Maryland amounted to very little, and consisted in the main of books on a variety of subjects. In 1923-1924 the books in the Dental and Law Libraries were combined, and an effort was made to organize the contents. Suitable sectional bookcases were placed in the Medical School Library, the first evidence of a modern dental library. This Dental Library remained in Davidge Hall until the beginning of the fiscal year 1926-1927, when it was removed to the School of Dentistry.

There were several cases filled with books on pharmacy in the Medical Library and, as time went on, this collection as well as that of the Dental Library was augmented by accessions of books and journals. In this manner the libraries of the various departments of the University were brought together upon the same site, an arrangement calculated to promote a closer relationship between them.

The merger of the Baltimore Medical College with the University of Maryland School of Medicine in 1913 brought an addition of books and journals to Davidge Hall; and in 1915, when the merger with the College of Physicians and Surgeons was accomplished, 417 books were added, with a number of handsome bookcases which were erected around the walls of the basement. With this collection came also 4 large case-books recording the treatment of rabies by the late Dr. Nathaniel Garland Kierle, the Director of the Pasteur Institute of Baltimore.

When the affiliation with St. John's College, Annapolis, lapsed in 1920, and the Maryland Agricultural College at College Park became the Department of Arts and Sciences of the University of Maryland, the office of President



FIG. 2. THE INTERIOR OF THE LIBRARY

was substituted for that of Provost. Dr. Thomas Fell was the last Provost of the University, and Dr. Albert F. Woods was the first President.

The Library functioned for a century as a "Gift" Library, supported almost entirely by donations from authors, publishers and the alumni. There were both locked cases and open shelves under supervision. As the various schools of the University grew in size they erected their own buildings, withdrew their libraries from Davidge Hall and employed their own librarians. The first to leave was the School of Commerce, with 99 volumes, then the School of Dentistry in 1926, with 306 volumes, followed in 1927 by the School of Pharmacy, with 170 volumes. The general (classical) library of 1,000 volumes was transferred to College Park in 1931. Thus the Library of the School of Medicine became the sole occupant of the first floor and the gallery of Davidge Hall.

As far back as 1914 the Library was surrounded by small trees and a brick sidewalk, which was replaced in 1916 by one of cement. Some semblance of its former existence as a church edifice still endured. There were 3 fine stained glass memorial windows, of which two remain to embellish the reading room. The communion railing had been removed and stored in the basement, but the platform was in place and on it stood the librarian's desk for 8 years.

Since 1916 there have been 3 restorations. In

1925 the Library was remodeled by the addition of 2 galleries and the opening of the front gallery, which had formerly been closed, to meet them. The old platform and the librarian's desk thereon were removed, together with some of the antiquated bookcases. In their places was built a counter with an enclosed office. The east gallery had 3 rooms for conferences and 1 for a law professor's office. A Practice Court of the Law School was held each week in one of these rooms. The west and front galleries were open and used for study purposes.

When the Law Library was moved to its present site in 1931, the School of Medicine made changes in the reading room of Davidge Hall. The wire screen bookcases were removed and in their places metal bookcases, specially designed journal racks, a catalog and dictionary stand, and filing cases were added. A fine linoleum of a soft green shade to match the metal equipment was laid upon the ancient board flooring of the reading room, and a small private office for the librarian created.

One of the large glass memorial windows was removed and a niche formed in its place. Here, upon a beautiful walnut pedestal stands a bust of Dr. James M. H. Rowland, the work of his daughter, Mrs. Carl D. Clarke. This bust was presented on Rowland Day, December 18, 1936, when the University celebrated Dr. Rowland's twentieth anniversary as Dean of the School of

Medicine and his 40th anniversary as a member of its Faculty.

Central heating to take the place of the coal furnace was installed in 1936. In October, 1937 a more extensive remodeling of the Library was begun. The dingy, dark vestibule, which was poorly lighted and included a telephone booth, has been replaced by a charming foyer with hardwood floors and steps. Balustrades of wrought iron and brass railings, new lights, and a neat wall telephone have also been added. The walls of the Library throughout have been painted a soft Nile green, with ceilings in an off-white color. The woodwork has been finished in mahogany. In the basement a new floor of concrete has been laid and painted gray, and metal book stands and an electric book elevator were installed. The basement windows were fitted with iron grills which lend dignity to the old colonial structure.

The spirits of our deceased alumni are ever-present. By their loyalty, bequests, and the memorials established by their friends, their names are forever linked with the annals of the School.

A portrait of Dr. Eugene Fauntleroy Cordell, painted by the late Irving Ward, was the gift of the alumni of the School of Medicine. Presented to the Library on Academic Day in 1914, after appropriate services in Westminster Presbyterian Church, it hangs in the foyer and is a constant reminder of our former librarian and of Maryland's most illustrious historiographer. Dr. Cordell's *Medical Annals of Maryland* and *The History of the University of Maryland* in 2 volumes are well-known and monumental works. The Library of the School of Medicine is indeed a fitting memorial to Dr. Cordell. He was generous with his leisure, information and gifts, and the existence of the Library is due in a large measure to his loyalty, zeal and devotion.

The General LaFayette Memorial Flag was given to the Library in December, 1917 by the Maryland Society of the Daughters of the American Revolution in honor of General LaFayette, upon whom in 1824 was conferred the first degree of Doctors of Laws by the University of Maryland. The presentation of this flag was a noteworthy occasion. The academic procession with Dr. Thomas Fell, Provost of the University, Right Reverend John Gardner Murray, Protestant Episcopal Bishop of Maryland, the Deans and Faculties of the various schools, in academic dress, formed in the

medical college building and proceeded to the Library as an escort for Captain Jacques Raffray, who represented M. Jules Jusserand, the French Ambassador to the United States, and other officers and members of the French Army. A large gathering of members of historical and patriotic societies and interested spectators had assembled. The unveiling of the flag, the speeches made, and the beautiful rendition of the "Marseillaise" and the "Star Spangled Banner" by the late Dr. B. Merrill Hopkinson, a Professor of the School of Dentistry, will long be remembered by those who were present.

One of the most highly prized possessions of the Library is the collection of portraits and biographies, and the Mortality Roll of the University's Gold Star men and women in the World War.

A sum of money for the purchase of medical literature was subscribed by the Medical Alumni under the care of the Endowment Fund of the University of Maryland and established in memory of Dr. Burt J. Asper, Gold Medalist of the Class of 1911, who was reported drowned or missing from the U.S. Collier Cyclops on March 4, 1918.

The same form of permanent memorial, and a portrait and tablet were presented by the friends of Major German H. H. Emory, LL.B., Class of 1903, who was killed in action on November 1, 1918.

A gift of current scientific journals was made by Mr. Henry P. Hynson in memory of his son, Henry Parr Hynson, Jr., LL.B., Class of 1909, Ensign U. S. N., who was accidentally killed by the explosion of a depth bomb on February 24, 1919. After the death of Mr. Henry P. Hynson, Sr. the firm of Hynson, Westcott and Dunning provided for a continuation of the gift of these journals.

In 1930 a collection of books was given by the friends, associates and students of Dr. Joseph W. Holland (1869-1929), Clinical Professor of Surgery, University of Maryland, together with a picture of Dr. Holland, a plaque of dedication, and a bookcase. To this was added 160 books from his private library. A suitable individual bookplate, beautifully designed, completed the memorial.

The front gallery of the Library is dedicated to the late Dr. Gordon Wilson, one of the most scholarly members of the Faculty, who was Professor of Medicine from 1914 to 1932. A picture of Dr. Wilson and a memorial in bronze

adorn the wall, and his own furniture grouped here stimulates study and contemplation.

In May, 1933 a valuable library of books and journals was presented to the Library by Mrs. J. C. Hemmeter in memory of her husband, Dr. John C. Hemmeter, a former Professor of Physiology in the University. A suitable memorial bookplate was made for this collection.

The Library of Congress in 1917 presented to the Library 83 volumes of medical journals; these included some of the rare early volumes of *Lancet* (London). The Medical Alumni Association, the Surgical Staff of the University Hospital and the Medical Library Exchange have contributed many useful additions to our files.

In 1920 Miss Ella Webb, through Dr. Henry J. Walton, donated a portrait of Dr. Nathan R. Smith, commonly known in the early days of the School as "The Emperor."

In March, 1924 Dean Rowland purchased and presented *A Dissertation on Mercury* by Martin Fenwick (Class of 1813), the earliest writing by a medical alumnus in the Library. The Splint Club has given valuable assistance, and in the past 2 years gifts of money and rare medical works have been presented by the Medical Alumni. In June of this year Dr. William H. Marsh, the oldest living active medical alumnus of the School of Medicine, contributed a cartoon (caricature) of the Faculty of Physic of 1876, framed in a period frame.

No history of the Medical Library would be complete without a reference to its departed friends, Professor Randolph Winslow, Professor John R. Winslow, and Dr. Nathan Winslow, all of whom died in 1937. These men, all accomplished writers, by their generous gifts and unceasing interest in the Library proved their love for their Alma Mater. Professor Randolph Winslow was Chairman of the Medical Library Committee for many years, and under his guidance and influence the librarian became imbued with the history and traditions of the University of Maryland, a heritage which is hereby gratefully acknowledged.

In the Bodleian Library, Oxford University, England, repose many thousands of volumes which contain the story of the world's intellectual life. Here and there between the stacks and on the walls are treasures of a different sort—memories of men and women who have lived in the past, things of no literary value but full of human interest, such as portraits, letters autographs, the exercise books of the young scholars

Edward VI and Elizabeth, and the Shelley relics. A similar sentiment prevails in the Library of the School of Medicine. Here are housed over 18,000 medical books and journals which contain much that is precious to learning. It is a partial record of the world's scientific achievements in the medical sciences and memorabilia of many kinds associated with the alumni. Among the alumni collection are autographed presentation copies of their works, and these which were submitted for the degree of Doctor of Medicine from 1817 to 1886. Many of them were written in Latin. Some are adorned with unique embellishments, such as ribbons, fancy pictures, pen-and-ink sketches, according to the taste of the writer.

The reprinted publications of the alumni are collected, filed, indexed and bound in volumes designated as *Contributions to Medicine and Surgery by the Alumni and Staff of the University of Maryland School of Medicine*. The writings of Dr. Cordell have become famous through the years, and the works of other medical alumni writers appearing on the Library's shelves add lustre to the venerable institution. Dr. John Beale Davidge, founder of the University, wrote *Physical Sketches* and *Nosologia Methodica*; Dr. Nathaniel Potter, Professor of the Theory and Practice of Medicine (1807), wrote a book on *Contagion*; Dr. John D. Godman, Professor of Anatomy (1819), wrote *Ramblings of a Naturalist* and other publications; Dr. Nathan R. Smith, Professor of Surgery (1827), wrote *Surgical Diseases of the Arteries* and *Treatment of Fractures of the Lower Extremity*; Dr. Robley Dunglison, Professor of Materia Medica (1833), was a writer whose knowledge was almost encyclopedic and he wrote on every subject except surgery; his *Medical Dictionary*, of which the Library has several copies, ran through 20 editions; Dr. Charles Frick, Professor of Materia Medica and Therapeutics (1858), was an investigator of note whose book on *Renal Diseases* is a classic; Dr. Edward Warren, Professor of Materia Medica and Therapeutics (1860), became Surgeon-General of North Carolina and later of Egypt. He died in Paris as Warren Bey, under which title he was known in Egypt. His works, *A Doctor's Experiences in Three Continents* and *An Epitome of Practical Surgery for Field and Hospital*, had a deserved popularity in their day. Dr. William A. Hammond, who held the Chair of Anatomy and Physiology (1860), is said to have introduced

the study of histology into the curriculum. He was appointed Surgeon-General of the United States Army in 1862 and to him is due the honor of originating the Medical Library of the Surgeon-General's Library in Washington. The Library of the School of Medicine has 9 books of which he is the author, the best known of which is *A Treatise on the Nervous System*, which ran through several editions.

When the present librarian was appointed in July, 1914 the Library was a consolidated one and represented Medicine, Law, Dentistry, Pharmacy and, for a short time, the School of Commerce. Dr. Cordell had passed away, the recipient of many honors from his Alma Mater. Between 1913 and 1914 Samuel Want, a lawyer, held the position of librarian. The scientific library, i.e., Medicine, Dentistry, and Pharmacy, was under lock and key in old-style wire screen bookcases arranged around the sides of the walls, and in bookcases which had come into the building filled with books, the bequests of members of the alumni. There was a partial manuscript catalog of the scientific books but no catalog for the law books, and no accession or classification for any of the books or periodicals.

From 1914 to 1937 the author was in charge of the Library as it existed in Davidge Hall. In 1914 the librarian and the assistants were appointed by the Board of Regents of the University of Maryland. When the University became a State-owned institution in 1920 they were appointed under the Merit System of the State of Maryland after a competitive examination. The Library staff in 1914 consisted of the librarian and 2 assistants who were either lawyers or law-trained men. They circulated books and journals, and acted in the capacity of student advisers for the Law School. The present staff was organized in 1931 and consists of the librarian and 1 assistant, between whom the library is divided. The Library is now open throughout the year, except on legal and special University holidays, from 9:00 A.M. to 9:00 P.M., not including Sundays, and closes at 4:30 P.M. on Saturdays during the school year.

In 1937 Mr. Carl W. Hintz was appointed librarian of the University of Maryland, with headquarters at College Park. Mr. Hintz supervises the work of all the libraries of the University and has his Baltimore office in the front gallery room in Davidge Hall.

The use of the Library was increasing



FIG. 3. RUTH LEE BRISCOE, LIBRARIAN

steadily in all departments and there were frequently 100 students in the reading room at one time before the organization of separate libraries in each school. It was necessary to enforce considerable discipline and care of library material and as a result there was little time for the regular desk work of the Library. At that time the average daily attendance in the school year was 350 readers, ranging in groups of from 20 to 100. Approximately 100 textbooks were circulated during the library day; there was no means of computing the use of the open shelves by the Law School. Textbooks were circulated in the reading room only on printed slips, which were surrendered upon the return of the book. A notation from the office of the Comptroller in 1924 quoted "\$3,064.22 spent in all departments of the Library." Another statement (1927) values the contents of the Library at \$94,939.83, the building at \$17,250.00.

The period 1914-1931 was one of intense activity in the Library, for that was the duration of the consolidation. A Medical Library Committee consisting of Dr. H. Boyd Wylie, Dr. Nathan Winslow, and Dr. G. Carroll Lockard, Chairman, was appointed by Dean Rowland in 1928. Dr. Nathan Winslow, since deceased,



FIG. 4. UPPER LEFT: THE BOOK PLATE USED BY DR. JOHN CRAWFORD IN 1813 WHEN THE LIBRARY WAS FOUNDED. LOWER LEFT: THE EARLIEST BOOK PLATE USED BY THE LIBRARY. ABOVE: THE PRESENT BOOK PLATE.

served for several years and resigned, and was succeeded by Dr. William S. Love, Jr. When the Law School withdrew its Library in 1931 a reorganization of the Medical Library was immediately begun by the Committee. The Library was reclassified by the Boston Medical Library classification, the official one for medical libraries since 1920. A set of rules for its government was printed and a small budget for the operation and maintenance of the Library secured. These funds are about equally distributed in book purchases, journal subscriptions and binding. What had existed for 117 years as a reference library became, with certain specifications, a circulating one. The gallery rooms were closed for study purposes and the books printed prior to 1840 were stored in 2 of these rooms. The Crawford Collection appears in this category, with its rare editions of the works of Hippocrates, Aretaeus, Celsus, Rufus of Ephesus, Vesalius, Sennert, Riolanus, Malpighi, Linnaeus, Reamur and others. These

2 rooms, now called "Treasure Rooms," are locked and the books on the shelves are arranged according to author. In one of the "Treasure Rooms" are pictures and busts of members of the Faculty of Medicine, and theses of the students of the School of Medicine which were submitted for the degree of Doctor of Medicine from 1817 to 1886. These theses have been bound in 189 volumes. There are also bound volumes of the reprints of the alumni titled *Contributions to Medicine and Surgery by the Alumni and Staff of the University of Maryland School of Medicine*.

The Library rules were revised in October, 1937 and made more expansive, so that textbooks are now circulated. To supplement the work of reference and research the Library offers interlibrary service for wanted material which it does not have. Seventy-two interlibrary loans were made from January to June, 1938 from the Army Medical Library of Washington, the Johns Hopkins University

Library, the Welch Medical Library, and the Library of the New York Academy of Medicine of New York.

The history of the basement of the Library is quite interesting for in it were enacted many pleasurable and dramatic episodes. It was first used as a gymnasium under the Y.M.C.A., then in 1917 as an office for the sale of law books by James M. Hepbron, who had it cleaned and whitewashed at his own expense. During the World War the Students' Army Training Corps used it as a mess hall, and in it the supplies for Base Hospital Unit No. 42 were packed by the Red Cross. The Babies' and Children's Clinic was moved over to the basement when it outgrew the quarters in the old hospital and remained there from 1920 to 1936. In connection with this Clinic many delightful entertainments of a social nature were held by Dr. and Mrs. Charles E. Summers in order to interest the public in the care and welfare of the dispensary for children.

The duplicate collection of library material was arranged in the basement from 1917 to 1922. The increasing growth and demands of the Babies' and Children's Clinic for more space made it necessary to move the duplicates and for several years this material lay neglected in the basement of an unused building owned by the University. The Library Committee was successful in securing a three story building at 113 South Greene Street which was also owned by the University, into which the books and journals were moved. This and the adjoining building were condemned in 1938 by the Bal-

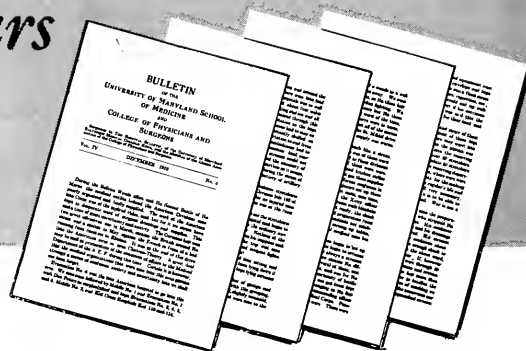
timore City Inspector of Buildings and razed. After various peregrinations the large accumulation of duplicates was brought back to the basement of Davidge Hall, its original location.

The Library is custodian of the furniture and library of the late Dr. Frank Bressler, Class of 1885, College of Physicians and Surgeons, until space is provided for them in the new Bressler Memorial Building.

According to the last figure quoted by Dr. Cordell, the Library in 1906 possessed 6,280 volumes. In 1915 an appropriation of \$50.00 was made for the purchase of medical journals and \$100.00 for binding which sums have been steadily increased until the present time. The Library now owns 18,500 volumes. It receives 225 medical journals, of which 44 are in foreign languages. One thousand dollars are spent annually for the purchase of books, and the binding of journals, periodicals, etc. amounts to \$700.00. The total circulation for the year 1937 was 3,098 volumes.

Such, in brief, is the history of the Library of the University of Maryland, now in the second century of its existence. Under the inspiring leadership of Dean Rowland and Dr. G. Carroll Lockard, who has been Chairman of the Medical Library Committee for a decade, the Library has made marked progress in the selection of books and journals and in achieving physical changes in the building. From a small beginning in 1813, with 300 volumes, the Library has grown with periods of suspended animation to its present size.

Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE UNIVERSITY OF MARYLAND

Vol. 22

JANUARY, 1938

No. 3

THE MEDICAL SCHOOLS OF BALTIMORE*

ALEXIUS MCGLANNAN, A.M., M.D., LL.D.
BALTIMORE, MARYLAND

The College of Medicine of Maryland found its origin in a riot, and contention was the original sin of its offspring now gathered together in the Medical School of the University of Maryland.

Charles Frederick Weisenthal came from Prussia in 1755 to become the Sydenham of Baltimore. For 34 years he was the leading physician of the town and the most prominent medical teacher of the day. In 1789 his son Andrew, together with Dr. George Buchannan, failed in their attempt to found a medical school, but Andrew Weisenthal continued to teach anatomy and surgery until his death in 1798.

John Beale Davidge was born in Annapolis in 1768. He began the study of medicine as a pupil of Doctors James and William Murray in his native town. Later he went to Edinburg and graduated from Glasgow in 1793. After a short period of practice in Birmingham, England he brought his young Scotch wife to make their home in the newly chartered city of Baltimore during the summer of 1796.

Andrew Weisenthal's classes were successful but ended with his death. The Medical and Chirurgical Faculty, the state medical society of Maryland, began to consider plans for a school of medicine at its second session.

In 1802, one year later, Davidge advertised private courses of lectures on anatomy, surgery, midwifery and physiology. In 1806 James Cocke joined Davidge and John Shaw in their plans for establishing a medical school. Davidge taught anatomy, surgery and obstetrics, meeting his students in a small building which he had erected adjoining his office on the east side of Liberty near Saratoga Street. Here in November, 1807 he secured a cadaver and began a

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Lombard and Greene Streets
Baltimore, Md.

Entered as second-class matter June 16, 1915, at the Postoffice at Baltimore, Maryland, under the Act of August 24, 1912.

Dr. McGlannan, Professor Emeritus of Surgery and formerly Chief Surgeon at the Mercy Hospital, contributed this exciting account of the several medical colleges which ultimately in one way or another became the University of Maryland School of Medicine.

dissection. At that time there was strong, popular prejudice against dissection in Baltimore. Perhaps in this case the proximity of St. Paul's Cemetery, which was only one square away, was too suggestive. For some reason or other a mob of the offended populace demolished the house and its contents to show its opposition to the dissection of the human body.

Adverse popular opinion was so strong that Davidge could obtain no redress for the damage done him. This was also true in the case of Doctor Weisenthal when in 1788 the body of an executed murderer was taken by force from his students by the populace of the town.

This time, however, the medical profession was organized and stimulated by the violence lost no time in preparing the charter which passed the Legislature on December 18th, 1807 and founded the College of Medicine of Maryland. The first classes were held in the homes of the professors, but in 1811 it was decided to build a home for the school. Accordingly, a lot at the corner of Lombard and Greene Streets, then the western boundary of the city, was bought from Colonel John Eager Howard. Colonel Howard sold the property to the faculty on credit for \$10,000 and then contributed \$1,000 to the funds of the school. Colonel Howard was, therefore, the first patron of the Medical School and laid the cornerstone on May 7th, 1812. This building, designed by R. Cary Long after the model of the Pantheon, remains the center of the University of Maryland in Baltimore, and today is the oldest building in the United States devoted continuously to the teaching of medicine. In December, 1812 an Act of the Legislature authorized the Medical College to annex other faculties and found the University of Maryland.

Davidge was the first Dean of the Medical School and served as Professor of Anatomy and Surgery. He also substituted in other departments whenever a professorship became vacant. For 22 years he alternated between anatomy and surgery, sometimes holding both chairs, sometimes giving up one or the other to Gibson or Pattison and finally both to Nathan R. Smith, who succeeded him as the dominating force in the University.

Few of these years were free from trouble. Importunate creditors, temperamental professors, who were sensitive of privileges and prerogatives and quarreled with one another or with outsiders, duels, disorderly students and turbulent janitors, all contributed to prevent a contemplative life.

In 1824 a serious difference of opinion as to the right of professors to take classes of students outside the regular courses led to the decision of the regents "that no professor should, during the session of the classes deliver any lecture to the pupils of the College and receive compensation therefor, except officially *ex cathedra*." This decision offended Davidge and De Butts, Professor of Chemistry, who felt it restricted their rights as it certainly did their income. To gain redress they set on foot the movement which led to the supplementary charter of 1825, which took the school away from the Board of Regents made up of professors and placed it under a Board of Trustees made up of laymen appointed by the State.

At the same time another difficulty presented itself, namely, the organization of a rival institution, the Washington Medical College. After spending ten days in Annapolis in company with De Butts, Nathaniel Potter, Professor of Medicine at the College of Medicine of Maryland, learned of the proposal to change the government of his own school and that his colleague, De Butts, was a prime mover in the scheme. Potter entered the fray with two fights on his hands. Surprised and horrified he expressed his abhorrence to his colleague, who remained silent, and in no uncertain language announced his opinion that the men associated with the proposed new school were too contemptible to deserve the notice of the old one.

Court proceedings decided that the Legislature had exceeded its right and that the original charter was inviolate, but in the years required to arrive at this decision the institution suffered from dissension. For a time 2 schools, each claiming to be the legitimate one, divided the class of students reduced in number by the controversy and by the attractions of the rival school.

The Washington Medical College began in 1827 in a building on Holliday Street near Saratoga. The school prospered and in 1838 moved to its new building on North Broadway. Those who are acquainted with the Church Home and Infirmary will remember the circular room with the high ceiling in the central building. This room is the remains of the amphitheatre of the Washington Medical College, for whose use the building was erected.

The Washington University was founded with this Medical School as a nucleus. In 1849 it was found that Broadway was too remote and the University therefore built the new assembly

rooms at Hanover and Lombard Streets. This project overtaxed the resources of the institution and the sale of the building in 1851 caused its suspension.

Horatio Gates Jameson, the moving spirit in the new Washington Medical College, received his degree with the class of 1813 at the first commencement of the University of Maryland. He was a man of great ability, a skillful surgeon and a good teacher. Early in his career he aspired to a position in the University of Maryland. From a letter written in 1822 it is evident that in one of the exchanges between Davidge and Pattison, Davidge asked Jameson to assist him in his practical surgery before the class. The position did not develop and Jameson joined the group who instituted the new school. He bore the brunt of the antagonism of the Faculty of the old school and was bitterly attacked.

During the memorable winter of 1825-26 when the new school was chartered, Duncan Turnbull, a subordinate in the Department of Anatomy of the University of Maryland, published a pamphlet in which a scurrilous attack was made upon Jameson's private and professional character. Jameson treated this attack with silent contempt. However, when the pamphlet was republished in 1828 by Fred. E. B. Hintze, he brought this young man into court and at the trial uncovered and exposed the instigators of the attack. Jameson was completely vindicated by the outcome of the trial. In spite of the vindication the persecution of Jameson had its effect, so that when in 1835 the invitation came he left Baltimore for Cincinnati.

From the suspension of the Washington University in 1851 to the beginning of the Civil War there was comparative peace and harmony in the University of Maryland.

In April, 1860 Edward Warren came from North Carolina to succeed Charles Frick as Professor of Materia Medica and Therapeutics. Thirty-two years of age, physically attractive and mentally keen, he possessed a dash and manner which carried him to high places in an adventurous life. He was well educated, graduated from the Medical School of the University of Virginia and a year later from Jefferson Medical College. Next he studied in Paris with and under Trousseau, Velpeau, Nelaton, Ricord, Charcot and others whose friendship helped him in later years. Soon after Warren had completed his first course of lectures the first blood of the Civil War was shed. This occurred when the 6th Massachusetts Regiment was attacked by a

mob as it marched through Baltimore. Warren sent his family to North Carolina and undertook a mission south to obtain arms and equipment for Maryland volunteers. The development of the military situation made it impossible for him to return to Baltimore until after the war was over.

In 1861 some letters were sent by the Faculty to Warren, asking his intentions about returning to Baltimore, criticizing the neglect of his duty at the infirmary and finally notifying him that his chair would be declared vacant on July 25th unless he was heard from before that date. Warren's spirited answers did not remove the difficulty but the chair was not declared vacant until 2 years later.

Warren served with distinction in the Confederate Army and at the end of the war as a Brigadier General and Medical Inspector of the Army of Northern Virginia.

Returning to Baltimore after the war, he was unsuccessful in his attempt to regain his position in the University. In 1867 with Harvey L. Byrd, Thomas L. Bond and others he reestablished the Washington University and began instruction at the northeast corner of Calvert and Saratoga Streets. He obtained from the City and State and popularized the school by a system of scholarships which admitted southern veterans at merely nominal rates. After one or two sessions an old public school on the northwest corner of Calvert and Saratoga Streets was given to the State by the City, to be used as a hospital and medical school by the Faculty of the Washington University and its successors. This building adjoined the City Spring Park and was converted into a hospital with accommodations for lectures, experiments, etc.

In 1872 dissensions arose in the Faculty. Warren and Byrd withdrew and with Thomas Opie, John Lynch, Peter Goolrich and W. W. Murray incorporated the College of Physicians and Surgeons. The lectures were given in the new assembly rooms, the building erected by the original Faculty of the Washington University in 1849, and in chambers first occupied by the Baltimore College of Dental Surgery. About this time, however, Warren began to lose caste in Baltimore, General Ketchum died under suspicious circumstances and Mrs. Wharton was accused of having poisoned him with tartar emetic. At the trial in 1871-72 Warren was the chief medical expert for the defense and upon his testimony that the death of the General was due to cerebro-spinal meningitis and not to an-

timonial poisoning, she was acquitted. During this trial Warren made the retort to the prosecuting attorney which has become famous: "You doctors bury your mistakes 6 feet under the ground," commented the attorney, to which Warren replied, "You lawyers hang yours 6 feet above the ground."

This case brought Warren great notoriety, far and wide, but it hurt his reputation in Baltimore and ruined his practice. The following spring he left Baltimore to enter the service of the Khedive as Chief Surgeon on the General Staff of the Egyptian Army. Good fortune attended him and as Warren Bey he was the most famous doctor in Egypt. Fearing blindness from ophthalmia, in 1875 he sought relief in Paris under the care of Dr. Landolt. Warned that a return to Egypt would mean the loss of his vision, Warren decided to remain in Paris.

The influence of his youthful friends, Charcot and Ricord, made him a licentiate of the University and he began to practice in the French capital. A prosperous practice with honors of many kinds from various sources came to him and he occupied a prominent place among the Americans in Paris until his death in 1893.

Dr. Opie was Dean of the College of Physicians and Surgeons from its incorporation until his retirement in 1903. The Faculty was made up of progressive men and the school prospered. In 1874 the Faculty opened the Maternite Hospital on Lombard Street just west of Hanover, the first lying-in hospital in the State. In 1877 the College of Physicians and Surgeons took over the Washington University School of Medicine and in this way obtained possession of the building at Calvert and Saratoga Streets and control of the City Hospital.

The old building housed the hospital as well as the college. A steep staircase ran from the Saratoga Street entrance to the second floor. The space under this staircase was used as a makeshift city morgue. This dissecting room remained at Hanover and Lombard Streets until the building was remodeled in 1890, at which time the new City Hospital was built by the Sisters of Mercy on the City Spring lot adjoining the College. The Maternite Hospital remained on Lombard Street until the big fire of 1904. About 1881 dissension arose which caused a break in the Faculty of the College of Physicians and Surgeons and in the fall of that year Harvey L. Byrd withdrew and founded the Baltimore Medical College. The cause of this dissension is not plain, but a curious pro-

vision of the new school required that "every one appointed or elected a professor or teacher shall declare his belief in the Christian Religion." This provision was doubtless rescinded for in later years the Faculty of the Baltimore Medical College showed a mixture of all religions and no religion.

The Baltimore Medical College started in a building on Paca Street south of Franklin and offered coeducation. Women apparently were not attracted by the invitation because the Women's Medical College was incorporated in the following year.

Later the Baltimore Medical College moved to Linden Avenue, Madison and Howard Streets. This completed a cycle, as the institution occupied part of the grounds of the first almshouse of Baltimore where clinical instruction was given to the first classes of the Medical School of Maryland.

The Johns Hopkins Medical School began its existence entirely independent of the other schools. The original endowment was inadequate and for several years teaching was limited to a few postgraduate students in the hospital. In 1892 Miss Mary Garrett contributed the necessary funds on condition that women be admitted on the *same* terms as men. When this contract was prepared by the Trustees it read that women were to be admitted on *equal* terms with men. Miss Garrett objected to this phraseology and insisted that the contract should be on the *same* terms as men and it was so amended.

Doctor Welch was the first of the Medical Faculty to come to Baltimore. He received a warm welcome, his course in pathology attracted the best doctors of the city and he promptly became an influential and important member of the medical profession of Baltimore.

Doctor Welch facetiously attributed his warm welcome and popularity to the fact that he came to Baltimore as a pathologist and not as a rival practitioner. That the Baltimore men were not so narrow is shown by Osler's adoption a few years later. It is true that Doctor Osler had the advantage of having his way prepared for him by Doctor Welch.

While Osler's personal qualities and accomplishments were unquestionably the source of his great and lasting good influence on the profession in Baltimore, some small credit must be given to the men and women who were ready to receive it.

Unfortunately, Doctor Welch is no longer with us. However, those who attended the

opening of the Welch Library and the inauguration of the Professor of Medical History saw that "age could not wither nor custom stale his infinite variety."

Early in the 20th century the pressure on the unendowed medical schools began to be felt. Higher entrance requirements and longer and more expensive courses put the cost of medical education beyond the ability of the student to pay. Endowment or State aid became necessary. The Baltimore Medical College was the first of the three medical school to succumb to the pressure. In 1912 it was joined to the Medical School of the University of Maryland. In 1915 the Faculty of Physic of the University and the Faculty of the College of Physicians and Surgeons realized that neither of them could continue to exist alone and united under the title of University of Maryland School of Medicine and College of Physicians and Surgeons. With a small endowment and a State appropriation,

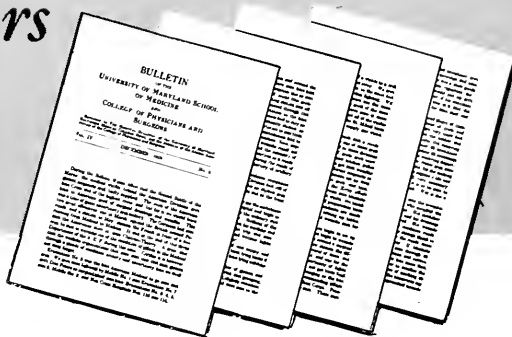
and by strict economy and much sacrifice the new Faculty carried the school through the years of the Great War.

Through the activity of the Medical Faculty the professional schools in Baltimore were united with the Maryland State College of Agriculture at College Park in 1920 to create the University of Maryland as a State Institution.

At the present time the Medical School of the University of Maryland enjoys a comparatively happy existence. There are no dissensions in our Faculty. We are on cordial relations with the Johns Hopkins Medical School. There is a free exchange of ideas and material between the 2 schools and some interlocking of personnel.

When we remember the lean years of strife and contention that marked the past, we hope that our present era of unity, peace and concord foretells prosperity and greater usefulness for both institutions.

Pages from the Bulletin of yesteryears



GRANVILLE SHARP PATTISON, THE DUELING ANATOMIST*†

FRANK H. J. FIGGE, A.B., Ph.D.

BALTIMORE, MD.

About 118 years ago there echoed in the halls of the University of Maryland the voice of a man who, in spite of his much disputed reputation, is one of the most colorful characters to be found in the early history of American medicine. I should like to introduce Granville Sharp Pattison. That so much has been written about him is evidence not of his reputation as a teacher, which was incidentally quite high, but rather evidence of his aforesaid moral reputation.

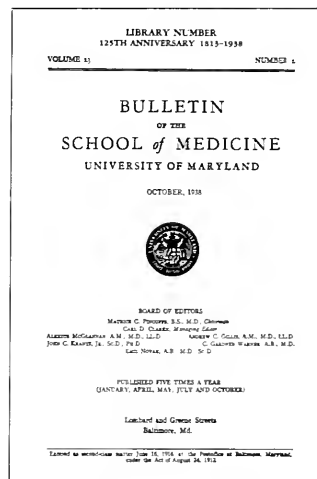
William Snow Miller of the University of Wisconsin has made a study of a collection of papers and documents concerning Pattison. I shall refer frequently to his paper and to Cordell's History of the University of Maryland. Both authors give the impression that Pattison was probably antagonistic and somewhat of a Casanova. Miller writes: "Being a man of intense feeling and strong prejudices he did not easily brook opposition. Because of these characteristics, the early years of his career were stormy and his reputation as a teacher was fully acquired only after many bitter controversies, one of which was so acrimonious that it was fought out on the 'field of honor'."

Before going into the details of Pattison's life I should like to say that, as one of my predecessors, I shall endeavor to clear his name of at least one or two counts. I shall also attempt to prove that Pattison was a victim of circumstances who antagonized a few men and made a decided enemy of Dr. Nathaniel Chapman of the University of Pennsylvania. Chapman's behavior in this controversy, in my opinion, did him little credit.

Granville Sharp Pattison was the youngest son of John Pattison of Kellin Grove, Glasgow. He was probably educated at the University of Glasgow and must have been a hardworking student, for at the age of 18 he was made assistant to Allen Burns. On the death of Burns three years later, Pattison became his successor in the Chairs of Anatomy, Physiology and Surgery. During the next five years he earned quite a reputation as a lecturer, and became a recognized

*From the Department of Anatomy, School of Medicine, University of Maryland.

†Address before the Cordell Historical Society of the University of Maryland, April 20, 1938.



A colorful figure of the early days on Greene Street was Granville Sharp Pattison, Professor of Anatomy. Pattison was vividly portrayed by Frank H. J. Figge.

and estimable member of the then-existing societies and a contributor to their journal.

According to Pattison's pamphlets in November, 1818, Dr. Ure, one of Pattison's colleagues, charged him with having had improper relations with his wife, and a divorce was obtained by Dr. Ure on these grounds. The divorce was granted in February, 1819, before Pattison knew anything of the matter. Pattison challenged Dr. Ure as soon as he heard of the accusation and wanted to take the matter to court, but was told by his legal advisors that he could do nothing until Dr. Ure sued him for damages, owing to the peculiarities of Scotland's ecclesiastical courts from which the divorce was granted. Pattison's agents, however, went to Mrs. Ure to ascertain her object in supporting her husband in this infamous transaction. They obtained from her a letter saying that she had wanted a divorce and in order to obtain it, had been induced by her husband's threats and bribes to accuse Pattison. Dr. Ure had not fulfilled his promises in regard to certain sums of money and she, therefore, confessed that her declarations were false. The second action or suit against Pattison which would have enabled him to appear in court and disprove the charge was never instituted by Dr. Ure, even though Pattison remained in Glasgow 4 or 5 months. Miller states that: "In Glasgow and among the other members of the Andersonian Institute the charge was generally discredited, for Dr. Ure did not possess an enviable reputation. In fact, a statement is made that he barely escaped transportation to Botany Bay 'for fraudulently stealing and destroying his father's will'."

This episode was just one of the many unfortunate ones for Pattison and even though it was generally known to be unfounded, it never ceased to be recalled and played an important role in the turbulent years which followed.

On this side of the water the situation at the University of Pennsylvania was this: Dr. Chapman was professor of the theory and practice of medicine; Dr. Physick was Professor of Surgery; Dr. Dewees was Professor of Obstetrics; Dr. Dorsey, the Professor of Anatomy, had recently died and his chair was being temporarily filled by Dr. Physick. As is usual when a chair is left vacant, the rest of the faculty held a conference to consider candidates to fill the vacant chair. As a result in this particular instance it appears that Pattison was

informed of the vacancy by his brother, at the request of Drs. Chapman and Dewees.

To quote from Pattison's publications:

Hearing frequently from my brother and writing him occasionally on the subject of the professorship, I continued to pursue my usual avocations, until I received on the 17th of May, 1819, Dr. Dewee's letter. From the letters I had forwarded I conceived that the rank I held in my profession would have been so well known in Philadelphia as to have prevented any gentleman from sending me such an invitation, unless, as he then expressed it, *my election was certain*. But unwilling to decide on a matter of such consequence without the advice of my friends, I went into Edinburgh on the morning of the 19th and laid the letter before them, to ascertain their opinion of its contents. And as they were unanimously of the opinion that Dr. Dewee's letter was *equivalent to an appointment*, I left that city the following morning for London, to take leave of my friends of the metropolis. (Pattison, 1820).

Miller writes of this matter as follows:

Shortly before sailing, while he was in London, Pattison was made a member of the Medico-Chirurgical Society of London and a Fellow of the Royal College of Surgeons. Had there been the stain on his character which was charged against him, it seems doubtful if these honors would have been bestowed on him.

Just at this time there was a great deal of intrigue taking place in the faculty of the University of Pennsylvania, and in 1819 Philip Syng Physick allowed himself to be transferred against his will from the Chair of Surgery to that of anatomy.

Upon arrival in Philadelphia Pattison learned to his great surprise and astonishment that Dr. Physick had been appointed to the Chair of Anatomy. Chapman and Dewees had told Pattison's brother that the transfer was necessary because there was another candidate for the position, a Dr. Hewson, whose friends had pressed the day of election. Had they not transferred Physick to that position, Hewson would doubtless have been elected. They also assured Pattison's brother that matters could be arranged satisfactorily by making Pattison the professor of surgery, and Pattison and Physick could then exchange positions. However, a few days later Dr. Gibson, professor of surgery at the University of Maryland, arrived in Philadelphia, and Pattison was then informed that Gibson was to hold the Chair of Surgery. Pattison was offered the opportunity of sharing a

position with Gibson or Physick, but he refused to accept such an arrangement. According to Miller, "Chapman made the statement to Pattison that he thought by transferring Dr. Physick to the Chair of Anatomy and by bringing Dr. Gibson from Baltimore to occupy the Chair of Surgery, the changes 'would operate beneficially in two ways. They would strengthen the University of Pennsylvania and at the same time weaken that of Maryland'."

After repeated promises from Chapman that were not fulfilled Pattison became impatient and informed the authorities at the University of Pennsylvania that before sailing he had ordered his assistant to pack his museum and hold it in readiness for shipment. This was now ready and he wished to know whether he should have it shipped or whether he could not depend on their promises. Chapman and Physick both urged him to have his museum shipped. The museum arrived. Pattison grew more suspicious of continued vague promises "and therefore began to give independent lectures on anatomy and surgery, and he says that he had 'a class of above 190 students'. The hour of Pattison's lecture was fixed after consultation with Chapman and was one which Chapman assured Pattison would not conflict with any of the Professors. When, however, Chapman learned that Pattison's lectures were popular with the students, he changed the hour of his own lecture to that used by Pattison and thus prevented the students from attending Pattison's lecture." (Miller.)

Pattison had previously declined the Chair of Anatomy at Transylvania University in Kentucky and also one at Maryland, but after this episode he accepted the Chair of Surgery at the University of Maryland in 1820. He hoped to leave behind him all the intrigue, deception and trickery that he had encountered at the hands of Chapman, but his hopes were in vain. Chapman followed him to Baltimore and in Pattison's words, "apparently for the purpose of shutting me out from the hospitality of the citizens by the most foul, the most malignant and the most false insinuations against my character."

According to Cordell:

On the 12th of October, 1820, Pattison wrote to Chapman, asking if he were responsible for the statement that he, Pattison, was the author of an anonymous letter. He demanded an im-

mediate answer. Chapman made no reply. Pattison determined to proceed to Philadelphia at once for the purpose of demanding satisfaction, and sought the aid of Dr. Patrick Macaulay, of Baltimore, as his second. Dr. Macaulay wrote Chapman on the 17th that the letter which Pattison had sent had been written by his advice; that he had twice persuaded Pattison to delay going to Philadelphia, and he now asked for some explanation as to Chapman's conduct and intentions. To this letter Chapman replied on the 19th. He began with an account of Pattison's candidacy for the Chair of Surgery in the University of Pennsylvania.

Then Chapman went on to speak of the motives which led Pattison to leave his native country. He said that it was in consequence of an odious deed and an incensed public opinion; that he had seen the proof of a trial in which Dr. Ure, one of Pattison's colleagues in the Andersonian Institution at Glasgow, had obtained a divorce from his wife on the ground of improper relations with Pattison. For these and other reasons, Chapman refused to have any intercourse with Pattison. On the receipt of this letter by Macaulay, Pattison's rage knew no bounds.

Miller states that Pattison went to Philadelphia, and on October 23, 1820 posted in two public places the following notice:

TO THE PUBLIC

Whereas, Nathaniel Chapman, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, etc. etc. has propagated scandalous and unfounded reports against my character; and Whereas, when properly applied to, he has refused to give any explanation of his conduct, or the satisfaction which every gentleman has a right to demand, and which no one having any claim to that character can refuse, I am compelled to the only step left me, and opst the said Dr. Nathaniel Chapman, as a liar, a coward, and a scoundrel.

GRANVILLE SHARP PATTISON

Following the European custom, Pattison resolved to stay two days in Philadelphia; but he says, "My stay, however was not long left to my option . . . I was arrested at 1 o'clock A.M. of the day on which I had put up the post. Dr. Chapman denies all agency in the matter, be it so."

Chapman endeavored to justify his declination of the challenge in a pamphlet which he had published in November, 1820. He said that

he had received no formal challenge, but even if he had, the disparity of age (yet he was only a little over 40 at this time, just 12 years difference), the inequality of social condition, the claims of a numerous family and the obligations imposed by his public station would have prevented his acceptance. "It really would seem," he added, "under any circumstances not quite fit to have introduced my course of lectures with the spectacle of a duel.—With Mr. Pattison it is entirely different. He is an adventurer with a tainted reputation which he hopes to repair, etc."

The discussion thus begun was continued for some time. Among others Professor Gibson took part in the controversy and disparaged Pattison's claims to anatomical discovery. Pattison apparently claimed to have discovered what is now known as Colles' fascia. Gibson, probably inspired by Chapman, "found in Colles' *Surgical Anatomy* an unusually full and well written account of these very parts which Pattison claimed as a discovery of his own." (Miller.) I have examined Colles' *Surgical Anatomy* and find that the account of this fascia, while it may be well written, is very brief probably because it was not known to be of practical importance. Pattison probably deserves credit for pointing out that certain post-operative results were best explained by the presence of this structure. Had it not been for the personal antagonism of these men, this fascia might have been named after Pattison instead of Colles.

Dr. Chapman in September, 1820 published a pamphlet on the official transcript of *The Divorce of Andrew Ure, M. D., vs. Catherine Ure for adultery with Granville Sharp Pattison* and distributed 10,000 copies. Pattison immediately published a refutation of all the charges made in Chapman's writings. In the conclusion he says "having seduced me from my country he has deceived me with promises; he has attempted to blacken and blast my reputation, and when he has driven me by unmerited insults, which no man who had spark of feeling could submit to, to ask from him an explanation, he has as an apology for his cowardice, circulated over the whole continent, a slander of a description most destructive and poisonous to the reputation of a professional character."

The following year, 1821, Chapman issued another pamphlet on the same subject and

published two editions. Pattison immediately published a final reply to these numerous slanders. In this pamphlet he spoke of Chapman's motives for all the slander. "Chapman has endeavored to persuade gentlemen at a distance that the University of Maryland is a school where they must not trust their sons, because Mr. Pattison holds a professorship in it. The impotent efforts to injure the University of Maryland by the circulation of slanders against its Professor of Anatomy has not been confined to Dr. Chapman. One of his colleagues has been equally active."

The professors of surgery (Gibson) and of the practice of medicine (Chapman) in the University of Pennsylvania, if they flatter themselves that by a line of conduct so base and so dishonorable they will be enabled to injure either my reputation or the standing of the University of Maryland, have miserably mistaken the feelings of their countrymen. Both the University of Maryland and my character are open to free and critical examination of a discerning public. If undeserving of public support, it will speedily be withdrawn from us, but if it is otherwise—if we can substantiate our claim to the patronage of our countrymen, neither backbiting, nor slander, nor the circulation of falsehood will have the effect of removing it from us.

I have now forever done with these. To engage in controversy with such, I have proved is useless; for by them truth and honor is disregarded. Ten months they have been engaged in the filling of their 'green bag', which has been opened and its contents circulated over the whole face of the country—I have now refuted these, and should they ever hatch up any other calumny, I shall treat it with the silent contempt it merits.

In a year or so, the affair became more serious than a battle of words. According to Cordell, "Upon General Thomas Cadwalader devolved the duty of maintaining the honor of his native city against our belligerent Scotchman. He and Professor Chapman were brothers-in-law, and became accidentally involved by resenting an insult offered to Chapman by Pattison in his presence. The result was a challenge and a hostile meeting. The duel took place in 1823 or 1824 somewhere in Delaware and both parties displayed great coolness and unflinching courage. Cadwalader was severely wounded, the ball of his opponent's pistol entering his pistol arm near the wrist, traversing the entire length of the forearm and

lodging in the head of the ulna*; it remained there throughout his life, causing great irritation, impairing his health and it was thought actually shortening his life. Pattison escaped without injury, but a ball passed through the skirt of his coat near the waist."

The University of Maryland was in the doldrums when Pattison arrived in 1820, but he seemed to have infused new vigor into the Institution. Pattison had brought with him the anatomical preparations which had been accumulated by Burns and had been bequeathed to him by the latter. This collection, like its owner, was extensively advertised in the medical journals and newspapers of the country. The influence which Pattison now exerted in the councils of the University was paramount and he used it to dispose of his collection. It was purchased by the faculty for an anatomical and pathological museum for \$8000, and Practice Hall was erected shortly after (1821) to give it accommodation.

As a teacher, Pattison seemed to be quite successful and the University not only flourished but was well attended under his influence. In 1826 he resigned and returned to England. Neither Cordell nor Miller seems to have discovered any good reason for this act. Cordell states that it was "on account of bad health and uncongeniality of climate." In a footnote he makes the following statement, which seems to me is not to be relied upon as it is based on the statement made seventy years after this period. "Pattison's career in Baltimore was not a very reputable one in a normal point of view. He led a 'gay' life and so undermined his health thereby that when he left here his recovery was considered doubtful. He is said to have 'taken so much mercury that he was afraid to take hold of the doorbells, for fear of an electric shock' (statement of a gentleman still living). There are traditions still extant of his amours with ladies of fashion." Pattison's 26 years of active service which followed his stay in Baltimore is the strongest evidence that he had not impaired his health.

With the assistance of the energetic Chapman to advertise him in pamphlets as he did, Pattison probably had to do very little to establish such a reputation. That Miller should not discern the real reason for Pattison's resignation is understandable, for he had made a study of Pattison's life and not of the history of the University of Maryland. It is surprising,

*Oleranon process according to B. N. A.

however, that Cordell did not note that Pattison's resignation coincided with the transfer of the control of the University from the regents to the Board of Trustees. In discussing the revolt of the faculty in 1837 which resulted in the overthrow of the trustees and the court decision that their appointment by the legislature in 1826 was unconstitutional, Cordell says: "It will be remembered with what a bad grace the faculty submitted to the authority of the Trustees in 1826, and how they were only deterred by the most formidable obstacles from testing the legality of the law deposing them from their rights. They tried to nourish into vitality a faint hope that things might not all go as badly as they anticipated. They were forced to make application for their former positions, which had been declared vacated by the trustees, and to receive them back from the hands of the latter. This was a humiliating proceeding for them and did not leave them the better disposed towards the new rulers who had been imposed upon them. They felt keenly, too, the loss of the privileges and authority which they had enjoyed for so many years, and realized painfully the inferior position to which they had been reduced."

Evidently Pattison was the only one of the faculty who had the entodermal fortitude to resign.

In July, 1827 he was appointed professor of anatomy in the newly organized University of London. Here he again encountered an adverse set of circumstances which, after four years, led to his dismissal. Lack of time prevents more than a mere mention of the factors involved.

First, he was a Scotchman who had taught anatomy in Scotland and America and according to Miller, "If anyone doubts the attitude of London at this time towards Scotchmen, led him read *The Life and Labors of Sir Charles Bell and His Letters*."

Second, by enforcing discipline in his classes he had incurred the dissatisfaction and complaints of certain of the students who were the pets of some of the other faculty members. It appears that these other professors, Drs. Turner and Thompson, not only listened to the student complaints, but behind closed doors were actually supporting and influencing them to make the complaints. A more unethical conduct on the part of a professor I cannot imagine.

Third, the University of London had appointed a Mr. Bennett as demonstrator in

anatomy without consulting Pattison. Pattison complained of Bennett's appointment as a grievance "as one unheard of in any medical institution in Europe and said 'that the independent nature of his appointment permitted him to intrigue against me with impunity.'" Bennett was one of the ringleaders of the complaining students.

Fourth, Wakely, the editor of *Lancet*, being an Englishman, was opposed to the Scotch, and therefore antagonistic toward Pattison and supported Bennett and the students.

Fifth, the straw that broke the camel's back was that Bennett, Drs. Thompson and Turner and the rebel students obtained some of the pamphlets which Chapman had published previously. These Wakely republished in the *Lancet* in August, 1830. The following month Pattison published a letter of explanation, along with letters of recommendation from important people in the United States, including one signed by the Secretaries of War, Treasury, Navy, State, and the Attorney General. A few months later, however, Pattison was dismissed.

Miller states:

Pattison was not long without a professorship, for in 1832 he took up his duties as Professor of Anatomy in the Jefferson Medical College in Philadelphia, where he met with immediate success. Pattison remained in Philadelphia until 1842, when he joined in founding the Medical Department of the University of New York. Here he held for the remainder of his life the Professorship of General Descriptive and Surgical Anatomy.

With his return to this country, the strife and turmoil of his life very largely disappeared. He married a Scotch lady by the name of Sharp who was possessed to some fortune. The marriage proved to be a very happy one. Gross gives a pleasing picture of their domestic life. He was ever ready to do a kind act, a lover of the beautiful in nature and art. He took an active interest in establishing the Grand Opera House in New York. He was also an enthusiastic disciple of Izaak Walton.

Pattison was the author of *The Register and Library of Medical and Chirurgical Science*. He edited with notes several textbooks of anatomy; he was one of the editors of the *American Medical Recorder*, a journal which contains many of his contributions to medical literature."

Pattison received the honorary M.D. late in life. From the facts derived from a careful

study of the discussions in the *Lancet* and which I have enumerated, I am inclined to disagree with Cordell when he states: "It is hard to reconcile the events in London with the exalted estimation in which he was held as a teacher and lecturer in America."

The final remarks by Pattison in the discussions with Wakely in the *Lancet* is interesting in this connection.

In the letters of Drs. Turner and Thompson, and in your 'strictures' on my statement, the fact of my having been a successful teacher in the United States is treated with contempt. 'It does not follow', observes Dr. Turner, 'that he could succeed in London because he was successful in America.' The Americans, forsooth, are easily satisfied. It is very well for John Bull to say so (says Pattison). I should, however have expected that you were too well informed as to the state of medical science in the United States to have given currency to such a vulgar and unfounded prejudice. The Americans, I assert, are as far advanced and as enlightened in their medical opinions as any country in Europe; and I would further assert, without the fear of contradiction, that there may be numbered amongst the medical profession of that country, gentlemen who, for extent and profundity of knowledge, and for capacity of conveying instruction, have no reason to fear comparison with the most eminent teachers in Europe. Let the improvements in medical and chirurgical science be reviewed for the last thirty years, and it will be found that America has furnished her full quota. (Pattison.)

Miller states that: "The defense of American medicine and American medical men by one who had good reason for resentment shows Pattison to have been a man of more character than is generally acknowledged."

In 1821, in answer to Gibson's disparaging remarks about his scientific accomplishments, Pattison made another statement that probably deserves further investigation.

I was the first in Europe who recommended the opening of the belly for the removal of tumors from that cavity, and it is true that it was stated in the 'Bulletin' that what I had done was in opposition to the established principles and authority of surgery. But the object of my essay was to overturn some of these, and to prove by the recital of a case, where life was certainly saved by the operation, that the axiom delivered to us from Hippocrates 'that wounds of the belly are fatal' was one supported not by truth, but by prejudice. My proposal for removing diseased ovaria which

was highly objected to, has, by the experience of McDowell, who was several times with success performed the operation, been demonstrated to have been most just and scientific. (Pattison.)

In view of the fact that McDowell did his first ovariectomy in 1809 and failed to publish an account of it until 1817, Pattison may well have performed an ovariectomy or other abdominal operation and reported it without knowing that this had been done by McDowell. In this connection it is interesting to note that McDowell was given his honorary M.D. from the University of Maryland in 1825, or during the time Pattison was most influential in its councils, and it is quite probable that he had some influence in this.

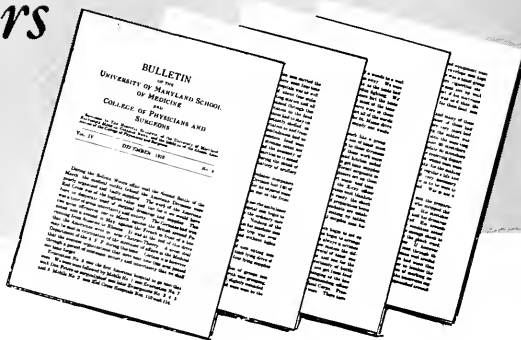
The review of Pattison's life leaves us with the impression of a man of talent and courage who was attacked with a virulence which might well have blasted the career of an individual of lesser determination and pugnacity. The story of his feuds with Chapman and others form a piquant episode in the early medical history of this country.

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Pages from the Bulletin of yesteryears



BULLETIN OF THE SCHOOL OF MEDICINE UNIVERSITY OF MARYLAND

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AS IT WAS IN THE BEGINNING A HISTORY OF THE UNIVERSITY HOSPITAL* ARTHUR J. LOMAS, M.D., C.M., D.P.H. BALTIMORE, MD.

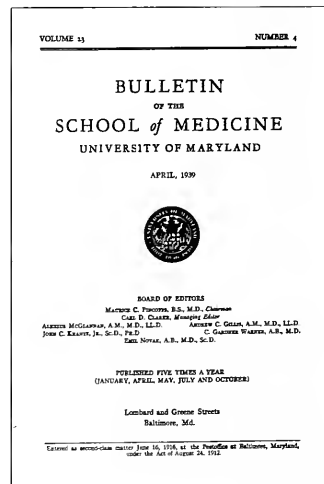
"I shall be content if those shall pronounce my history useful who desire to give of events as they did really happen, and as they are very likely, in accordance with human nature, to repeat themselves at some future time, if not exactly the same, yet very similar."

Thus has Thucydides provided me with a satisfactory introduction. If I wished to be more facetious, I might quote from Schlegel and say, "The historian is a prophet looking backwards."

I would take you back for awhile—backstage as it were, to see how the stage was set and how scenery was made, so that you may feel to be a part of the drama that I wish to present. I wish also to have you exult in the achievements of my characters, to struggle with them, to worry with them—but finally to succeed with them, so that we may all value more and more the great heritage which we enjoy today as a result of their sagacity, indomitable courage and determination.

Baltimore had only recently become a city. Fells Point, Old Town and Jones Town had combined their efforts and after much pleading a law was passed on the last day of the year 1796 constituting the town a city and incorporating the inhabitants in the name of the Mayor and City Council of Baltimore. According to the census taken three years after the incorporation, the population was a little more than 26,000. James Calhoun was elected Mayor early in 1797 and an election filled the offices in the various wards in the first and second branches of the newly constituted city.

* Address before the Cordell Historical Society of the University of Maryland, January 26, 1939.



During a brief illness, the late Arthur J. Lomas, Director of the University Hospital, conceived the idea of writing the history of the institution he served. This fine account of the beginnings of the hospital is reprinted in its entirety, that the younger physicians and students may capture the rich heritage and the colorful history of the hospital in which they perform their daily tasks.

The social life was that of a small provincial town. A great deal of activity centered about the Fountain Inn, which was situated about where the Southern Hotel is today. Here were marked the quarters occupied by Washington and also by Lafayette, and here was segregated the furniture used by both these gentlemen, and, of course, this provided an attraction for the inspection of reverent visitors.

Market Street was the fashionable quarter and ran out from the crowded business section far into the green fields and orchards of what was then the country. One of these green fields will interest us later on in our study.

A plan of the City of Baltimore of 1801 shows us Market Street running through the heart of town to the west. One notices that the streets below Market Street end at Union Street and this seems to mark the west and southwest limits of activity, as beyond this we find green stretches of undivided properties which were the neighboring farm lands, green fields and orchards. Thus do we have German Street, Cider Alley, Lombard Street, Whiskey Alley, Pratt Street and Bottle Alley ending at the aforementioned Union Street. Much of this land to the west bore interesting names. We had Ridgely's Delight, Welsh's Adventure and, up in the north, Spicer's Inheritance. Chatsworth's was the large stretch of property through which Reisterstown Pike ran, known to us today as Pennsylvania Avenue. Somewhere near the corner of Union Street and Pennsylvania Avenue was Pascault's. Further south was Raborg's and below Market Street (which is our present Baltimore Street) was Robinson's, the site in which we are interested at this time. Robinson's house was on the south side of Baltimore Street and just beyond was a very important tollgate which assessed the traffic going and coming through this important western portal.

It is of interest to note that there was a small stream which seems to have arisen somewhere about Hamilton Terrace. This ran down through the properties across Pennsylvania Avenue and was known as Chatsworth's Run. The stream wound its way down by the Robinson house, continued south over Robinson's property and on to the waterfront. It is not difficult for me to imagine that this water source has been and is playing a prominent part in the underground water of this area, and caused us considerable difficulty during the erection of the present new hospital, where it was discovered bubbling up

through the diggings at the time of the excavation.

Baltimore was really the meeting place of the several roads that came in from the various sections of the country and the sailing ships with their cargoes plying back and forth to the foreign places of the world.

One can picture Union Street late on a rainy night or, perhaps, in the early morning, with a salt tang or a smell of oakum in the air—the carpenter, cook and bosun's mate, sea bag in one arm and a shipmate on the other—sailing down Union Street bound for the Pratt Street wharf on a course south, a little east and west. A last ration will be taken aboard at the "Three Loggerheads" on Frederick Street near the docks before making ship. In an hour or two they will join in a capstan chanty or unfurl a topsail to catch a stray breeze on an ebb tide, bound for Rio.

According to Hall, "The status of the medical profession in Maryland is best illustrated by the fact that of the members of the Medical and Chirurgical Faculty in Maryland at this time numbering 241 names, but 43 or 17 per cent had any medical degree, and of these, 37 had the degree of Doctor of Medicine, and 6 that of the Bachelor of Medicine."

It is evident that the quarantine laws were rigid and reasonably effective. The following is a copy of a plea presented to the Mayor asking for reconsideration.

August 7, 1801

To James Calhoun, Esquire

Mayor of the City of Baltimore

The Petition of Daniel Sidenstricker, Gabriel and Christian Hertick to wit—

That your petitioners, together with Wm. McFarra, on Saturday last the first inst., were in a boat in pursuit of one Samuel Conway, who is in debt to your petitioner (Sidenstricker) \$19, expecting to find Conway on board a brig, then ready to sail to France; that in pursuit of this object we went below the fort where several vessels were laying; that not seeing the brig, we bore what we thought was innocent amusement and rowed our boat by several of the vessels laying below the fort to look them over and to read the names on their sterns—that while we were thus employed at some distance, we believe not more than thirty yards from one of the vessels, a gentleman hailed us from the cabin window of the vessel and asked where we came from. We replied, "From Baltimore." He then ordered us to come alongside the vessel, which we did not do. He then told us if we did not, he would fire on us. We replied that we were going about our business and he might fire. We, however,

thought it best to stop. He sent his boat and man and took us alongside of the vessel. When there, he ordered us on board the vessel, but we refused to go. He said he would teach us better in future than to go to vessel that had just come in, as we did not know but there might be sick people on board. We replied that it was worse to order us on board than to let us be as we were. He then sent us to the fort and after taking our names, we were dismissed. In the above proceedings we declare that we did not know we were doing anything amiss and that we had no intention whatever of having any communication with any vessel or any persons on board them. Believing we were acting innocently, considerable rough and perhaps irritating, if not insulting language was given to the gentleman who hailed and ordered us to the fort as above stated. That we have been arrested by the sheriff for the above conduct and to our great astonishment are told we have incurred a fine of \$200 each for which fines your petitioners, Gabriel and Christian have given bail, and your petitioner, Daniel, is now confined in jail.

We beg leave further to state that we are informed that altho there is no satisfactory authority to release these fines, yet it rests in your discretion to order and stop prosecutors for them which you have been pleased in some instances to do.

We, therefore, beg leave to pray that such interference in our favor may take place, and to declare and offer to your consideration as inducements thereto. That we in the above conduct had not the remotest idea of doing wrong—that being illiterate we have not been in the habit of reading the laws of the city published in the paper, or otherwise. That we did not know of any quarantine law whatever until since the above transaction, and we declare we had not even heard of there being sick. That we had not any intention of going on board any vessel or of having anything to say to any individual whatever on board any vessel then laying below the fort. That we did not know the gentleman who hailed us, nor did we know he was an officer of any kind until since the above conduct. That altho we move in an inferior grade of society, we are not insensible of the propriety of vigilantly guarding, by every possible means, the health of the community in which we live, and we are free to declare that, if no pecuniary penalty was attached to the violation of such measures, we should and do feel sufficient restraints from our duty to society and ourselves, to deter from it, and we hope we shall be believed in the declaration that few persons in any class of society would be from inclination less disgusted than ourselves to violate the police of the city and particularly that of such importance as we upon consideration admit and with unpleasant remembrance, feel the guardians of the health of the city to be.

If, therefore, we have thus become unintentional

offenders and upon the clemency and discretion of the chief magistrate of the city to relieve us from the severe fines which we are told we have incurred, and to pay which will sacrifice little property, we beg his interposition to stop the prosecutors against us, in our such manner and upon such terms as his clemency may direct.

Gabriel Hertick
Christian Hertick
Daniel Sidenstricker

We are unable to report that this prayer was answered satisfactorily.

Even to this time Baltimore had definitely established a medical precedence. The fame of Jenner had spread to the New World. Mr. William Taylor, a resident of Baltimore, received a supply of the new vaccine from his brother in London. A Dr. James Smith impressed the Maryland Legislature with the value of this serum, and was instrumental in bringing about a provision for its distribution throughout the State. This was apparently the first occasion in America of the free distribution of serum by the State authorities.

It is well known that at this period in the history of Baltimore and for a number of years afterward there was a very definite amount of yellow fever which came along with epidemic violence. One does not wonder at this when one realizes that a prominent man, Dr. David M. Reese, published his observations of one of the epidemics. He stated that, "Yellow fever appears to be a disease of our country, although not peculiar to it, and that it comes wherever vegetable matter accumulates, and is acted on by heat and moisture sufficiently to excite putrefaction, with the consequent Marsh Effluvia." In his footnote he stated, "Marsh Effluvia is the name appropriated to the cause of intermitting and remitting fevers in whatever it consists. It is composed most probably of gases enlivened during the putrefaction of vegetable matter."

So far I have provided only the simplest setting for our drama. I must now find some characters who shall play upon this stage. As early as the year 1800, a Dr. John B. Davidge, who had been educated in Europe, arranged a series of lectures on the principles and practice of midwifery. Later he added a course in practical surgery and, still later, a course in demonstrative anatomy. This work was carried on at his home, and so successful was it apparently that he was induced to erect a small structure known as Anatomical Hall at his

residence, Liberty and Saratoga Streets, which is now the site of the Rennert Hotel. At this time he was joined by his confreres, Dr. James Cocke and Dr. John Shaw, who lectured in anatomy and physiology.¹

It is evident that the urge to teach and organize a medical school and even a university was definitely present, but the germ that was to bring forth the Maryland University was hardly planted when a serious setback developed.

It is common knowledge among those interested that a group of ignorant and ill-advised neighbors took offense at the close proximity of a dissecting room, overnight organized a mob that demolished the Anatomical Hall and declared war against the whole enterprise. This was a serious disappointment, but men of such ability and high purpose were not to be turned aside by any such opposition. Things quieted down by 1807 and again their energies were directed toward teaching medicine.

A petition was presented to the General Assembly which fortunately was answered favorably, and a charter was granted authorizing the organization of a college to be named "The College of Medicine of Maryland". The Medical and Chirurgical Faculty of Maryland, which then had been constituted only a few years, was named the patron of the college. The President of this Faculty was to be the Chancellor, *ex officio*. The beginning of the college was obviously humble, as the Faculty consisted of four professors and the first session had but seven students attending. Such an organization, however, soon attracted those interested in the teaching of medicine. Dr. Elisha DeButts and Dr. Samuel Baker became members of the college. It is evident that considerable difficulty was experienced owing to the lack of suitable facilities to carry on their work. It was necessary, therefore, to raise funds to erect a suitable building. Even with their humility, it was decided that the building to be erected should be a worthy structure, and one to do honor to their calling as well as provide the necessary facilities. They again appealed to the Legislature for the necessary authority to raise funds by means of a lottery.

The first Act authorizing the lottery was passed in January, 1808. It named Colonel John Eager Howard, James Calhoun, James McHenry, Charles Ridgely of Hampton, William Gwynn, John Comegys, Charles War-

field, John Crawford, Solomon Birkhead and John B. Davidge as commissioners. A program for raising the necessary funds was arranged and a limit of \$40,000 was established.

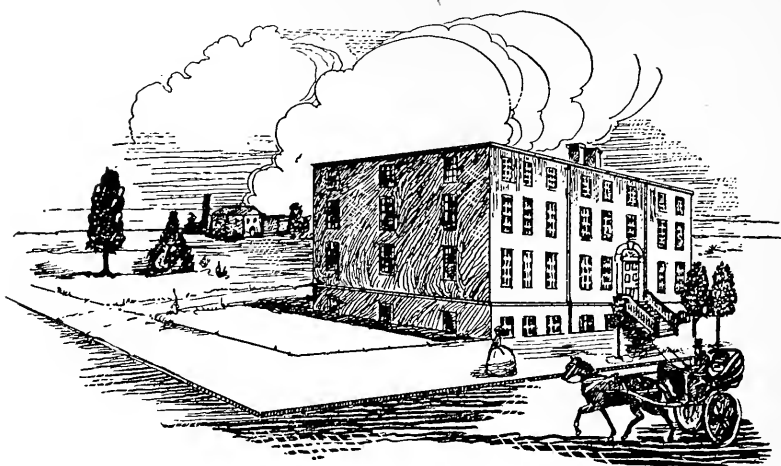
The purchase of the lot on the corner of Lombard and Greene Streets is well known, also that Mr. R. Cary Long, an eminent architect of the day, was entrusted with the work, and Messrs. Towson and Mosher were the contractors. The purchase price of the property was \$10,000. There was no security demanded, and there was no limitation as to the time of payment. Colonel Howard contributed \$1,000 of the purchase money and the balance, with interest, was subsequently paid in full.²

The Weekly Register of October 17, 1812 states, in an article concerning the College of Medicine, "Having been appointed a Committee to prepare a statement with regard to the condition and prospects of this institution, to the progress of the building for the accommodation of the class, to the courses of lectures to be delivered here next winter, etc. We proceed to state, that from the number of students who attended our college last winter, under temporary inconveniences with which we then had to contend, but which will have been entirely obviated by the commencement of our next course, from the conspicuous merit of our graduates last spring, from the zealous support of which we have been assured by physicians in various directions, from our central situation, we calculate on having a very respectable class next winter. We are, moreover, enabled to state with confidence that the building for the accommodation of the professors and students, which is already in great forwardness, will be prepared for the reception of the class by the first of November, and that the lecturing rooms will be convenient, comfortable and capable of containing from six to eight hundred persons, and that there are apartments, in the same building, calculated to favor the cultivation of practical anatomy, by students." Then follows a list of the Faculty. This statement was signed by Dr. James Cocke, Secretary, Baltimore, 24th August, 1812.

It is evident, of course, that the success of the entire enterprise depended very materially on the support from the lotteries. It would seem that at times even this support was anticipated and involved before earned. Here is an acknowledgement of indebtedness of May

¹ Cordell, p. 5.

² Cordell, pp. 21 and 22.



The first Baltimore Infirmary. Built in 1823 on a lot 75 ft. wide and 174 ft. deep. This lot was the middle of three such lots, all eventually made use of for additions to the Infirmary.

24, 1816 in which the anticipated earnings of a lottery are offered as a guarantee.

William Gibson, Jr.
Richard W. Hall
Maxwell McDowell

Baltimore, May 24, 1816

We, the undersigned, members of the Faculty of Physick, in the University of Maryland, being entitled by an Act of the Legislature of the State of Maryland, to all the proceeds arising from schemes of Lotteries drawn in conformity with the requisition of said Law, until the net sum of \$36,000 be received by them, and having disposed of one scheme of said Lottery privilege for the sum of \$12,500, propose to draw or sell another scheme some time in the year 1817, and being indebted to the City Bank of Baltimore at this time in the sum of ——— for which the said bank holds the note of certain members of said Faculty, and being likewise indebted to Robert Cary Long in the sum of \$4250.67 . . . and being willing to give every security for the payment of said sums of money in the power of said Faculty, do hereby pledge to the President of Directors of the City Bank of Baltimore, and to Mr. Robert Long such sum or sums of money as may arise from the disposition of the said lottery scheme, contemplated to be drawn or sold at the time aforesaid, in full payment of the principal and interest which may then be due and owing to the said bank and said Robert Long.

In witness whereof we have set our hands and seals respectively on the day of year first above written.

J. B. Davidge
Nathaniel Potter
Elisha DeButts
Samuel Baker

At the Sessions of 1816 the limits of the City were extended by an Act entitled "An Act to enlarge the bounds of Baltimore City". *Griffith's Annals* state that, "In order to prevent future inconvenience from irregular locations and the expense which might arise from changes necessary in streets, etc., thereafter, Commissioners were authorized by an Act of 1816 to carry out his extension program." It was at this time that Lombard Street was extended to the west. The expansion of the City, which had hitherto revolved around its trading center—the harbor—and tended toward the south and east, now radiated toward its newly-opened turnpikes to the north and west.

Baltimore's history is truly reflected in the names of its thoroughfares. The Lord's Proprietary gave us Baltimore, Calvert and Charles. The early British loyalty left us York, King George, Queen, Caroline and Hanover. England's marine influence left us Cheapside, Leadenhall, Wopping and Lombard. Our own Revolutionary period, with its triumphs and heroes, gave us Liberty, Lexington, Saratoga, Eutaw, Cowpen, Howard, Lee, Lafayette, Washington, Jefferson, Paca, Chase, Franklin and Greene, the latter street being named after Nathaniel Greene, one of Washington's ablest

generals. We have now established ourselves at the corner of Greene and Lombard Streets, or at least we have reasonably established this corner, if not ourselves.

The need of further facilities to carry on the work of the Faculty was sorely felt. Steiner says, in speaking of the new infirmary, "Its facility of access, being separated from the college building by only the width of the street, and its absolute control by the Faculty, at once gave the institution advantages possessed by no other school in that day." What could be simpler than to make use of the new site across the street? Consequently, a site on the southwest corner was leased. Cordell says, "The infirmary lot extended from a point 78 feet west of the corner of Greene, ran west 75 feet and south 174 feet to Whiskey Alley." This was the middle lot and left a corner lot 78 feet wide on Lombard Street and 174 feet on Greene Street. The middle, or infirmary lot, was leased from John S. Skinner to John B. Davidge, Elisha DeButts, Richard W. Hall, Nathaniel Potter, Granville Sharp Pattison, Samuel Baker and Maxwell McDowell. The corner lot was leased to Solomon Etting. It comprised eight lots, seven of them 21 feet wide and one 22 feet, 6 inches wide on Greene Street, running back 78 feet to the infirmary lot. These lots were finally purchased by the Trustees of the University of Maryland in July, 1833. This was made possible by the Gray legacy. It was, therefore, owned by the Regents of the University in fee simple and could not be diverted to any other purpose.

Lucas, in his *Sketch of Early Baltimore*, states: "Attached to the Medical School is the Baltimore Infirmary, which was established with a view of affording to the students an opportunity of witnessing the practice of their future profession and attending clinical lectures. There is a large and convenient building to the west of the college which is open every day for the reception of the sick, and excepting Sundays, for visitors. Three physicians and four surgeons attend to the patients of the house, who are nursed in the most tender and watchful manner by Sisters of Charity, who devote themselves to the task with piety the most devoted, and with a success fully commensurate to it. The expense for each patient is \$3.00 per week which includes board, professional attendance and nursing. It is under the immediate control of a Committee of three gentlemen."

All records of the hospital, all advertisements

and articles stress very strongly the fact that the infirmary was under the immediate control of the professors of the college. They offer this as one of their strong points and lay great emphasis on it at every opportunity. Steiner says, "There are four wards, one of which is reserved for eye cases. There are two resident physicians."

It seems almost impossible now to determine the exact shape of the building. It was a rectangular affair with a small addition in the rear. "The operating theatre was in the rear, but attached to the main building. It was surrounded by elevated seats capable of accommodating several hundred students."³ The building was erected by John Sinclair at a cost of \$11,589. The furniture and equipment cost \$2,520, so that the total cost was \$14,109.⁴ The money was raised mostly by the professors from their own funds and a private loan from the bank. It was their own building, private, and not any sense corporate.

Apparently there was quite a series of steps into the main entrance which led into a small hallway. On the right-hand side was the office. At the rear portion of the hallway was a staircase leading up to the second floor. The private apartments were on the second floor. Later, when difficulties arose, the Trustees did not hesitate to take the building away from these professors and, in fact, acted in an extremely commandeering manner.

As is well known, the care of the patients had been entrusted to the Sisters of Charity of Emmitsburg, Maryland. We have a letter from Father DuBois of Mount St. Mary's dated May 16, 1822, to a Mrs. M. Patterson, care of Richard Caton, Esquire, which contains the following:

To: Mrs. M. Patterson
Care of Richard Caton, Esquire
Baltimore, Md.

Mount St. Mary's, May 16, 1822

I communicated to the Council of our Sisters the letter with which you honored me on the 2nd inst. I can hardly express the joy they felt at the opening which your charity offers to their zeal. It is truly now that they feel they are true Sisters of Charity. They accept most willingly the offer which Dr. Patterson makes them of taking the management of his infirmary. He may depend upon their exertions, their economy, their human attentions to the sick, their cleanliness in every department of the house, but on his part, he must put an

³ Cordell.

⁴ MS records of University.

unlimited confidence in their management. He alone must have control over them. They must be at liberty to follow the rules of their institution which so far from interfering with their duties as nurses of the sick, will enable them to fulfill them with greater facility as this is the first trial of the kind which the Sisters have. Mr. Patterson must not expect the Sisters will do it with the perfection which experience only can obtain, but time will form them gradually. The limited number of the Sisters which prudence forbade us to extend beyond our means, will also at first confine our choice very much, particularly as we have already three establishments in New York, two in Philadelphia, besides the mother house and five Sisters at the head of every department here and prudence does not permit us to turn out young Sisters, until sufficiently tried and instructed. Hence, changes must be expected to take place pretty often until suitable persons perfectly adapted to the office are appointed. We must act as masons who try many stones to the wall before they are satisfied with the work. People who have no idea of our difficulties think we are inconstant because they know not our motive, but they will see at last that our object was the advantage of the establishments entrusted to our care, as rules must be made for our Sisters adapted to the plan formed by Dr. Patterson for his infirmary. I would consider this a particular favor if he would give me a sketch of it. Is it confined to men, or are both sexes to be admitted to it in different departments? What conditions are to be required for admittance if partly, or exclusively intended for men. It is evident there must be servant men to help the Sisters in those services which modesty does not permit them to render to them. Those men should not only be under the command of the Sisters but at their choice—otherwise they will not pay to them the respect and obedience necessary for the good order. Such men are not easy to find in the country, or if ever so good will soon be spoiled in the city. If God spares me, I intend to form a society or rather a secondary branch of our society, composed of men of the ——— society, who will devote themselves for life to the equally meritorious, though less conspicuous service of that kind, and upon whose moral deportment and religious obedience I can depend. In Europe, we could get faithful, honest, humble servants. In this country, scarcely any white men and very few of the blacks could be depended on.

It will be also necessary, according to the nature of Mr. Patterson's institution, to establish certain rules in the beginning which will secure for the Sisters from the patients admitted there that respect, that modest deportment in language and behavior which in Catholic countries is never departed from, but which might easily be forgotten here where they know nothing of the dignity and purity of those religious women who with so much

charity stoop to the meanest offices of servants.

I need not add with what pleasure, of course, the Sisters will fulfill the honorable function of mothers, or rather as they call themselves, servants of the poor which your zeal and charity offers them. You may proceed in the business as soon as you please, and you will find them ready to obey your call, too happy to fulfill one of their greatest obligations, and to share in the blessings which your charity will draw.

I will not say what I felt on receiving your letter. My tears flowed abundantly. God only can reward you. Our dear Emily has long since imposed upon me the sweet task of praying daily for you and your worthy family. I do it in confidence at the altar because there I am nothing. Jesus is all. . . . Will not the adorable victim listen now to the supplications of so many poor to whose temporal and spiritual welfare you are ready to provide? Will you have the goodness to honor me from time to time of the success of your charitable undertaking that we may prepare those Sisters who are to cooperate with you?

Most respectfully, I remain, dear Madam, your humble and devoted servant,

John Du Bois

We also have a copy of the original letter sent by Dr. Granville Sharp Pattison to the Mother Superior at Emmitsburg in which he states that the hospital needed the services of nursing Sisters, and asking that Sisters be sent down to take on nursing duties. This document is dated October 11, 1823.

Baltimore, October 11, 1823

My dear Sister,

As our Infirmary will be completed and ready for the reception of patients by the 20th of this month, we should wish you to send down the Sisters of Charity on or before that time. I am happy to be able to state that by paying the lady, who was engaged as matron, for her days, we will be able to place the whole direction of the institution under the management of the Sisters.

You stated to me when I had the pleasure of seeing you in Baltimore that you knew of a man who would be qualified to act as a porter. The management has made no appointment and will be ready to hire the person you recommend.

If it meets your approbation, I could recommend that the Sister who has to fill the situation of director of the institution, should come down to Baltimore immediately on the receipt of this letter. She could live in the Orphilene School until the Infirmary is prepared for the reception of herself and sisters. Our object in wishing to have her immediately is to advise with her as to the arrangement of your routine, etc. and likewise to decide what number of Sisters would be required to perform the duties of the establishment.

I shall expect to have your answer by return post.
I am, my dear Sister,

Your obedient servant,
Granville Sharp Pattison

It is interesting to note that Sister Joanna Smith of this Order was sent down as Sister Superior, and Sisters Ann, Adelle, Rebecca and Barbary were the first to report for duty. The Sisters of this Order continued a steady service from November 1823 until 1876.

We have a copy of the original articles of agreement in which the various understandings between the doctors and the Sisters were laid down.

Articles of Agreement Entered into, by and between the Managers of the Infirmary, in Baltimore and the underwritten Superior General of the Ladies incorporated under the name of Sisters of Charity of St. Joseph's, Witnesseth:

1st—That the conditions under which it is understood that Said Sisters of Charity are sent to and admitted at the Said Infirmary are that they will continue under the obedience of their Superior General and of their Central government near Emmitsburg, that they will be fully at liberty to follow their rules which so far from interfering with their duties as nurses, will afford them new means of fulfilling them with more fidelity.

2nd—As for the management of the temporalities relating to the Infirmary, the Said Sisters will be altogether under the authority and control of the managers of Said Institution and of the physicians who attend it, to whom they will pay implicit obedience for the same objects so that they will be ready to interrupt their religious exercises, anticipate or put off the time thereof or even omit them altogether if necessary—that being their main and first obligation.

3rd—The Said Sisters shall have alone the care and management of the interior concerns and labors of the Said Infirmary without having any woman or girl associated with or employed under them—being ready and willing to fulfill the most menial or disgusting offices for the sake of Him who did not disdain to annihilate himself for us poor sinners; so that the services of the Infirmary may be performed with more propriety, regularity and union, but they will have under them as many servant men, or hired men as the service of the Infirmary may require, appointed by themselves and whom they will be at liberty to dismiss if they think proper—"the object of those men is to render to the Infirmary such services as cannot be expected from women, such as carrying coals, wood, or water to and through the wards, when in large quantity, cutting wood when necessary, carrying heavy burdens, removing the sick men from one place to another, or rendering them services repugnant to

female delicacies or propriety, acting as porter, bringing loads of provisions from market, carrying messages for necessary and urgent business, and whereas experience has proved that the constitution of most women in this country is frequently injured by much washing, the Sisters will be at liberty to hire as many colored women by the day, every week as will be necessary to wash the linen of the house under one Sister appointed for that department, as more economical, than if the linen was put out to be washed—the linen and clothes of the medical students are excepted, with which, as requiring too much loss of time the Sisters will not meddle."

4th—The Sisters shall be boarded at the said Infirmary according to the Simplicity of their rule and furnished with all necessary medicines in case of sickness, as for their clothing which shall be provided for by the Mother house, the Managers will pay twenty-one dollars every six months for each and every one of the Sisters employed in the Infirmary and the said Sisters will never be required to change the stuff—the color or the form of clothes which are worn at the Mother house.

5th—The Sisters shall not be accountable for their Services, management and government of the house, but to the Managers or to a Committee appointed by them, as they could not do the good which is expected from them, unless they are supported by the Managers in their intercourse with the officers, agents or Servants of the Institution.

6th—If the Sisters should become infirm or sick, in consequence of the Services they should render to the house, they will not be sent away, unless recalled home by the aforesaid Superior General, but they will be maintained and kept in the Said Infirmary with their other Sisters, nursed and furnished with the necessary medicine, as members of the house; and to supply their place, the Managers will admit other Sisters who will be sent by said Superior; should any of the said Sisters happen to die at Said Infirmary, their burial expenses will be paid by the Managers at whatever place the Head Sister may request according to the Simplicity of their rule; should any of their Sisters or Candidates pass through Baltimore on their way from or to New York, Philadelphia or Emmitsburg, they will be permitted to lodge one night or two with their Sisters at the Infirmary to save them the inconvenience of lodging in private houses in town.

7th—The Head Sister shall neither admit, nor disrupt any sick persons without an order of the said Managers or of one appointed by them. She will keep a Register wherein she will set down the day of admission of any of the sick, of his going away or of his death—stating his name, surname, age, profession, religion, place of nativity and color: when any of them will come to the Infirmary an Inventory shall be made of the clothing, furniture, money, etc., he may bring with him, that it may

be returned to him when he goes away, or in case of death returned to his relations, or delivered to the Managers, as she shall be directed.

8th—Whereas many of the sick brought to the Infirmary, particularly the blacks, may have ragged, dirty clothes, even with vermin, by which the bed-clothings, even the very air of the wards might be infected to the great injury of their health, and of that of all the sick, loose dresses and linen shall be provided by the house to dress all of those who will be admitted therein, with which they shall be clothed at the moment of their admittance, after having been previously cleaned and even bathed if necessary and possible, after which their own clothing shall be washed, cleaned and mended to be returned to them when they leave the house, at which time the dresses belonging to the house will be taken from them. From this rule may be exempted those who will bring such clothes of their own as will be equally clean and suitable for their situation.

9th—At least once a year, the Managers will be requested by the Head Sister to make a review of all the furniture belonging to the house to determine upon the addition or reparations which may be necessary.

10th—It will be the duty of the Head Sister to see that all the sick should be equally and faithfully attended and to inform the attending physician of any omission on that score.

11th—The house will be habitually locked up, except at the hour appointed for the clinic classes, at which time, even the porter will require tickets of admission. . . . The said porter will admit nobody at any time but those whose admission will be authorized by the Board of Trustees, or who will have a ticket of admission from the physician appointed for the week, and that even at certain hours designated by the Board—respecting the visitors of the Sisters, of the young students boarding in the Infirmary and those of the relations or friends of the sick who may wish to see them, rules shall be made by the Board which the porter shall observe carefully, and the Sisters see are observed. In doubtful cases, the porter will submit them to the Head Sister, who will direct for that time, but refer it afterwards to the Board of Managers for her future direction.

12th—After ten at night neither the inmates of the Infirmary, officers, students, hired people or even new patients shall be permitted to go out or to come in the house without a special permission from the attending physician, or any other person appointed by the Board. At ten o'clock, the keys shall be brought to the Head Sister, who will keep them in her room, and will see that no abuse should exist in this respect through the connivance of the porter. Should any case occur in the night which would require the opening of the door, the Sister

who sets up, if there is occasion for it, will get the key out of the Sister's room—a bell will be hung in the porter's chamber for the Sister to wake him in this case that he may open the door. Should there be no Sister setting up, the Head Sister shall be called up either by the porter or by any of the students, who should notice that the porter being fast asleep does not hear the rapping at the door.

13th—Should any of the persons employed in or boarded at the Infirmary be detained in the city later than ten o'clock, he will remain among his friends—but should this happen oftentimes, as the service of the house may be materially injured by it, the Head Sister will give information thereof to the Board to determine upon it.

14th—The Head Sister will render a monthly detailed account of the money left in her hands for market or other expenses to the person appointed by the Board to receive it and that amount shall be closed on the 20th of every month at the time and place appointed by the Board, and signed by a member thereof with any observations found necessary for the ensuing month, for the direction of the Sister.

15th—The gross provisions shall be provided for by one of the Managers such as flour, wood, sugar, coffee, tea, salt, meat, or merchants and butchers will be appointed by the Board, who will have to furnish the same on order from the Head Sister, who will herself keep a regular account of what she will receive, and of the respective prices of said provisions should they appear different in quality, quantity or price according to the general currency of the market. It will be the duty of the Said Sister to inform the Board of Managers at their next meeting, or in case of urgent necessity, the person appointed by the Board to represent it in the interval of their meetings.

16th—The aforesaid Superior General of the Said Sisters will have it in his power to recall Said Sisters whenever he will think it expedient for the good order of their society, by sending others in their place at the expense of Said Sisters: as likewise said Manager will have a right to ask for other Sisters in the place of those whom they will not approve of, but in this case that travelling expenses of these, as well as of those who will be sent in their place, will be paid by the Managers of the Infirmary.

17th—The Managers will also pay the traveling expenses of Said Sisters in the following cases:

1—When they are sent for the first time to begin the establishment.

2—When others will be sent to replace those who will happen to die or who having worn their health and constitution in the service of the Infirmary, will be unable to bear any longer the hardships, should be recalled home to discharge the Infirmary.

3—In case of the non-execution of said agreement

by the aforesaid Managers which should compel said Superior to recall all the Sisters home.

18th—But should the Sisters themselves fail in fulfilling said agreement, they can be sent away at the expense of their community, if the Superiors being informed of it, do not remedy it within a reasonable time.

In confirmation whereof the said parties have hereunto set their hands this _____ day of _____ 1823, viz.—Said Managers through _____ and said Superior General himself in behalf and in the name of the Sisters of Charity of St. Joseph's near Emmitsburg.

They left very little to the imagination and covered each item rather thoroughly. Here also is a copy of the regulations of the Baltimore Infirmary.

REGULATIONS OF THE BALTIMORE INFIRMARY

PATIENTS

1—No patient shall be received without the payment of three dollars in advance and signing a guarantee—except in cases where the signer of the guarantee is known to be responsible. It shall be in the discretion of the student receiving the patient to require more than three dollars, if the case promises to be tedious and the parties are not known. The payment of three dollars a week in advance is to be continued as long as the patient remains in the house.

2—No patient is to leave the house without the permission of the attending physician, surgeon, Sister Superior or Senior Student.

3—The diet of the patients shall be under the exclusive control respectively of the attending physician and surgeon.

4—Any patient who is disorderly or who comes back intoxicated or otherwise violates these rules can be expelled by the Sister Superior or Senior Student.

5—All patients in cases of casual absence are required to be in the house before dark.

6—Smoking is prohibited on the wards.

7—No liquor is permitted to be brought into the house.

By order of the Faculty, the Treasurer is required to report all violations of the annexed rules which come to his knowledge.

REGULATIONS OF THE BALTIMORE INFIRMARY

DUTIES OF STUDENTS

They shall be in attendance at the house at all hours except meal times, and whenever absence may become necessary it is expected that one student shall be present at all times. There shall be

no admittance after 9:00 p.m. during the winter or 10:00 p.m. during the summer.

It shall be the duty of the Senior Students to keep the books of the house, to attend all white female patients, to assign the patients respectively to the other students as may seem best, to visit all the patients in the house before retiring and see that they are faithfully attended, to see that a record be kept of all the prescriptions, to collect the dues of the patients in the house and render to the Treasurer a weekly report of such collections and of the number of patients in the house. It shall be the duty of the other students to attend faithfully to such patients as may be assigned to them, to put up all prescriptions of the attending physician and surgeon and do all necessary dressings.

Every student shall subscribe his assent to these rules before entering upon the duties of the house.

The following notice was ordered to be placed on the doors of the student's rooms and to be signed by the Dean.

BY ORDER OF THE FACULTY

No visitors can be admitted to the student's private room on any pretense.

The above action was passed by request of students of the house. On motion of Dr. A——— it was unanimously resolved that the rules heretofore proposed by him in reference to the duties of the officers of the Infirmary be now adopted. They are as follows:

Resolved: That it shall be the duty of the attending physician to have entire charge of all the medical cases and the duty of the attending surgeon to have entire charge of all surgical cases in the house. Each to visit the house daily at some appointed hour.

Resolved: That the Treasurer of the Faculty with the title of Treasurer of Infirmary shall have charge of the books and accounts and of all matters relating to the house except those comprised in the duties of the attending physician and surgeon, viz., the medical and surgical treatment of patients.

Resolved: That it shall be his duty to report to the Faculty all violations of the rules for the students of the house which shall come to his knowledge.

Resolved: That the Treasurer of the Infirmary shall be elected annually hereafter in April of each year on the day fixed for the election of Dean—the election to be by ballot.

The Executive Committee of the Baltimore Infirmary of June, 1823 consisted of three persons, Solomon Etting, William Gwynn and R. B. Magruder. There seems to have been a considerable amount of dissension and difficulty. Apparently, the students resident in the house

had been having some trouble with the Sisters and had developed a habit of returning home late, that is, after ten o'clock. It would seem that this trouble developed until a complaint was lodged with Father DuBois. Father DuBois, who has been referred to several times in the above, was a French missionary priest who came to this country about 1798. He was sent out into the mission field and happened to be assigned to Frederick County, with his work centered in the parish of Emmitsburg. Ten years afterward, in 1808, he founded Mount St. Mary's College, which is an active institution today. In later years his work took him up into New York, where he eventually became Bishop of New York.

Father DuBois, after inquiring into these various complaints, sent the following letter to the Infirmary:

Mt. St. Mary's
January 7, 1824

My Dear Sir:

I have been in daily expectation of receiving from you a copy or rather, both copies of our agreement—signed by the Secretary of the Board in behalf of the managers of the Infirmary to be signed by myself and one returned to you. My anxiety on the subject does not proceed as you may be sure want of confidence in you would, but I wish to obviate any mistake that may be committed on both sides and draw a copy of it to be sent to our Sisters in Baltimore for their direction.

I understand that already some difficulty exists respecting the keeping of the key in the Head Sister's room and the hour appointed for the young gentlemen who board in the Infirmary to return, viz., 10 p.m. I was fully aware of the opposition this necessary rule of discipline would meet with on their part—and of many other difficulties which would arise from the admission of young boarders in the Infirmary—but as you gentlemen thought contrary to my opinion that it would be a profit to the Infirmary, and their attendance would be necessary there, though it is not the case in other hospitals, I put off the hour of shutting the doors as late as I could consistent with the other duties though not without some inconvenience for them. Still, it appears that your young gentlemen are not satisfied. I expected it so—had I even protracted it to 11 o'clock to the great annoyance of the whole house, they would not be contented. The clue of the business is a spirit of independence which prevails among our American youth. They have little idea of the momentary slavery which they must submit to in order to become skillful in their profession. They want to unite the pleasures of life with the serious studies of the medical art—and spoil them both. Happy

yet if at last, the brightest talents are not swallowed up in the vortex of dissipation. Permit me to discuss with you this important question on which depends in great measure the prosperity of your Infirmary and the continuance of the Sisters there.

I lay aside all the scandals, irregularities which the privilege claimed by the young students of returning to the Infirmary at any hour in the night, might introduce in the institution. I believe you, Mr. Smith, would not abuse of such a privilege but it is a precedent we must establish. Eight young men are to be admitted gradually—once the privilege granted, how shall we recall it, or limit it to one or two who may not abuse it. Can we flatter ourselves that *all* will be equally prudent. If the Head Sister does not keep the key in the room, who will keep it? Will it be the young men themselves? Then every one of them would have a key, as none ought to have a privilege above the others. Will it be left with the porter? But remember that the porter is a kind of servant liable to be bribed, to be imposed upon, to be *terrified into compliance* or *convenience* if not by threats at least by every abuse, *mortification* and tricks which youth and vice can invent to disgust a man of his situation. He will go and must be replaced by another, who will be treated in the same manner. The institution will lose the best characters until another will succeed who more anxious to keep his place, and less scrupulous, will become a ready tool in the hands of those young men in a house like this. I can find hardly one young man out of ten, firm enough and proficient enough to maintain the rule as a prefect or to unravel the schemes of boys and you will not expect to find such a disinterested firmness and consummate prudence in a servant. But secondly, what rest can our poor Sisters have after a long day of hardships—if after they are retired, they must be continually disturbed by the ringing of a bell or rapping at the door until perhaps 2 o'clock in the night. In vain will you say the young men will be warned not to disturb the house with noise. How could the porter be called to the door without noise? Can it be expected also that a laboring man will spend patiently a part of the night without getting asleep and of course, without considerable noise to wake him. What a pull back in all the duties of the house if 10 o'clock is too soon for the gentlemen to come to the Infirmary. How late will be late enough. Will it be 11 o'clock. But their balls and parties will not be broke up so soon, and many will be far from home and must have time to return even after the ball is broken up. Is this practicable in a regular house? But if neither the situation of the Sisters, nor that of the patients are taken into consideration, how will that continual noise at the doors and even reasonably in the house agree

with the quietness necessary for the poor sick people, and who will be continually roused out of their first soundest and most refreshing sleep? And where is the inconvenience these young men complain of? Are they not at liberty to stay the whole night with their friends if they wish to attend a party—if it is objected and their presence is necessary at night in the Infirmary. Why would it be more necessary from 12 o'clock at night until daybreak than from dark until 12 o'clock, but they cannot divide the task between them. Now cannot one of the two remain alternately in the Infirmary and the one who stays out inform the one who remains in the Infirmary where he goes that he may send for him if there should be a real case of necessity for it which probably will never occur. But if the number of these young men is raised to eight, how much easier will it not be for them to remedy this inconvenience. I know but one difficulty which arises not from the regulation but from the locality, viz., that by shutting all the doors the access to the necessities is stopt, but cannot this inconvenience be prevented by enclosing all the backyard by separating from the front by two side partitions with one gate for the admission of wagons, which should be locked at night and even in the day time. This precaution is necessary even now, to prevent those who have no tickets of admission from getting in the house by going around through the back doors; then the back doors may be left unlocked without inconvenience.

It appears to me after all that the idea of the house being injured by the young boarders leaving it in case they will not submit to this regularity is groundless. It appears to me that the \$300 board they have to pay will be fully spent if not overrun by their expenses—that their services are by no means *necessary*—that the Sisters can easily be brought to do everything the young men have to do—dressing wounds, bleeding, administering medicines, except in cases where modesty would not permit it and even then if really it was necessary to do it at night, the porter might be employed by them to do that which men alone could do with propriety. In Europe, our Sisters have no young students to do that. It is true that commonly there is either a physician or surgeon who resides in the yard or adjoining it, who may be called in, in a case of necessity, but until that can be done conveniently, one of the porters may be sent to call the nearest physician belonging to the Board if the case is very urgent, or the physician on duty, if the case is not pressing. Besides why could not the managers allow a gratuitous board to the poorer young man who considers the appointment as the greatest favor—would submit to every regulation—would be contented with the plainest of fare—and instead of dictating laws would be forever grateful for the honor conferred on him.

There are such appointments in Europe, and they are counted as the greatest privilege.

Be so good as to communicate the above to Dr. DeButts and the gentlemen of the Board and let me know their determination on the subject. You and they, I am sure, will pardon this intrusion of mine. It is prompted by the deep interest I take in your institution and the respect I entertain for yourself and your respectable partners in the most charitable work.

I have the honor to be, dear sir, your devoted and humble servant,

John DuBois

The Infirmary also shared in the general disagreement between Trustees and Regents. This dissension rose to such a state that the Infirmary was finally taken away from the Regents by the Legislature and operated by a Board of Trustees, notwithstanding the fact that the professors were still carrying on their free work in the institution, and also not withstanding the fact that the very building had been built with the money of the professors and loans for which they personally were responsible. The Government of the University of Maryland, therefore, was transferred to a new Board of Trustees of which the Governor of the State was President, and twenty-one gentlemen named in the law constituted the Board. This Board was authorized to choose a Vice-President, also appoint and dismiss provosts and professors. The proceeds of a lottery were appropriated to pay for the Infirmary, to purchase chemical apparatus, and also for the support of some of the other faculties.

The professors being finally debarred from the hospital, the Trustees took possession of it and not only refused to pay the professors for it, but even withheld the income derived from it.

Cordell states that, "By the end of the first decade, i.e., 1883, four new wards were added to the hospital and the number of beds was now 90." I am at a complete loss to determine where this addition was made definitely. So far I have described two lots, one on the corner and the Infirmary lot contiguous to it. There remained a third lot in between what was then the end of the old hospital, and what we understand today as the first tenement house next to the old hospital building. It would seem, therefore, that this extension of four wards on the west end of the hospital was made on a part of this third lot. There was a considerable amount of space here which was reserved for future use.

For the first few years the income of the Infirmary was considerably below the expenses, but about 1830 the budget was being balanced. The Infirmary also received about \$300 a year from the Gray legacy and the Government paid \$4,000 a year for service to sailors coming in off the ships.

In 1826 one of the leading characters of the Infirmary, Dr. Granville Sharp Pattison, went abroad. He never returned to Baltimore again.

The quarrels and dissensions continued between the professors and the Trustees. It will be understood that these doctors continued contributing their services as attending physicians, free of charge. As the establishment had now been taken over the State, or by the Trustees appointed by the State, the several professors made out a bill against the Trustees for the amount of money which they had expended in its erection and maintenance. Of course, the Trustees refused to pay any portion of this claim and an appeal was made to the Legislature. Finally, an Act was passed compelling a settlement. A committee was appointed to investigate the situation and after an exhaustive examination extending back to the year 1807, the committee reported in 1830 that \$15,474 was due the professors. The general operation of the hospital was subjected to a considerable amount of adverse criticism. It was accused of extravagance and irregularities in its management. The son of the Vice-President of the Board was secretary, and he received a salary of \$250 a year. The chairman of the committee received \$200 a year. Some time later this same officer was given the title of superintendent and received an annual salary of \$400. Later still he became governor, with a salary of \$800 a year.

There was considerable complaint as to the supplies of the hospital. Medicines were inferior, food was cheap and improperly prepared, and the professors were compelled to use their own instruments. They could not even obtain a supply of leeches! Much of this discussion took place with members of the student body, and the general situation became greatly aggravated. The Faculty endeavored to have legislative action favor them with seats on the Board of Trustees. This was in the year 1837. As might be expected, such a demand was denied.

The Regents presented an appeal to the Legislature asking the State to direct her agents, the

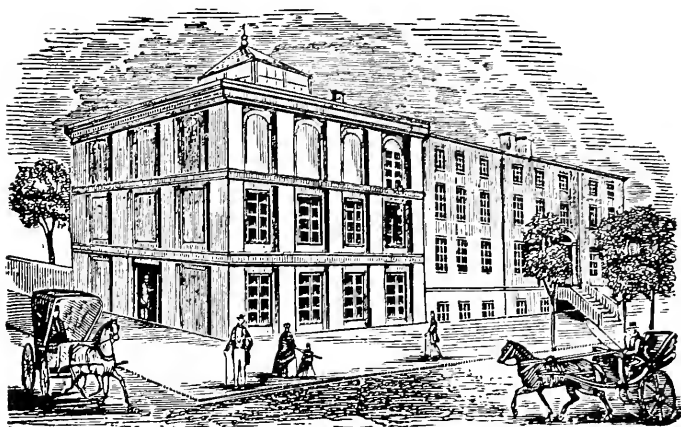
Trustees, to surrender their property to them. The Trustees, of course, were unwilling to abandon the fight. So keenly was this situation felt on all sides that the Trustees actually feared an outrage by the Regents. On July 15, 1839 they passed a resolution authorizing the employment of watchmen and other proper guards for the protection of the buildings and premises. This was countered by an appeal from the Trustees to the Legislature in which they offered arguments as to why the Trustees should be maintained, and asked not to be compelled to surrender the possession of what was State property and to leave the rights of others thereto protected by the State. The two memorials were referred to a joint committee of both houses. This joint committee brought in a lengthy report reviewing the whole question and recommended the passage of a bill restoring the property to the Regents in accordance with their request.

During these years the Baltimore Infirmary was greatly concerned with the large number of sick sailors arriving in the port. There was frequently a large amount of yellow fever to handle. Sailing ships were continually arriving in the port with a large number of their crew down with fever. The newspapers of this period carried many accounts of such happenings.

It will be borne in mind that several lotteries were held to take care of the University and Infirmary. Many advertisements appeared in the local papers advertising these lotteries and apparently not only did the Baltimore Infirmary share in these, but many of the churches of various denominations were built with such funds. For instance, "Ten days drawing will complete the University Lottery. Prizes of \$20,000, \$10,000, \$5,000, \$4,000, \$3,000, \$2,000 and a number of \$1,000 prizes. Whole tickets \$10; ½ tickets \$5. For sale at Robinson's Old Established Lottery and Exchange Office. Corner St. Paul's Lane and Market St." The history of lotteries at this time provides sufficient material for special treatment of itself.

A card or advertisement in the local paper stated, "Cupping and leeching. The gentlemen of the Medical Faculty and others are respectfully informed that particular attention will be paid to all orders for cupping and leeching that may be left at Dr. Love's Drug and Patent Medicine Store, 22 Center Market Space."

Conditions now seem to have settled down to the usual routine. The institution was kept busy and its accommodation was frequently sorely



The new addition is here shown, built on the corner lot, 78 ft. front and extending down Greene St. 174 ft. This picture first appeared in the Annual Circular, 1853.

taxed. The personnel of the school had been growing in number and attractiveness.

The board for patients in the hospital varied from \$3 to \$10 per week, depending on the accommodations. In the calendar for the year 1853-54 one finds the first illustration of the hospital. This shows the new addition added to the corner in 1852. You are all doubtless familiar with the picture of the old Baltimore Infirmary which is found on the back cover of the annual circular. Nowhere have I been able to obtain a picture of the hospital prior to 1853. This particular circular states that "an addition has recently been erected containing commodious private compartments separated from the more public portions of the house, etc." It is easy to determine the new addition to the hospital. It is of an entirely different type of architecture, with different floor levels and much larger window space. There is also quite a large skylight on top of the roof which was, of course, over the amphitheatre. The entrance to this building is on the Greene Street side.

"About this time, an important addition was made to the Infirmary by which private rooms were provided to meet an urgent need, and the clinical amphitheatre on the corner of Greene and Lombard Streets was erected. The institution now had a capacity of 150 beds and was the largest hospital in the city. There were 8 resident students and also a resident physician."⁵

A great deal of patronage was lost during the Civil War period, as much of the University

support came from the South. This brought about a temporary setback as far as the University was concerned. There is no sign, however, that the hospital suffered any loss. As a matter of fact, it seems apparent that the hospital was extremely busy throughout this time.

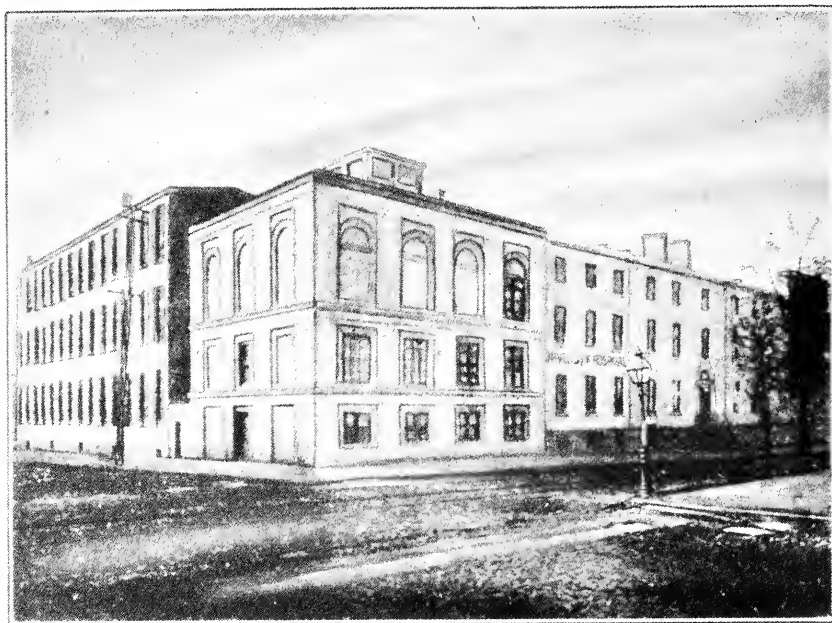
One reads in the University circular of 1870 of an extract from the report of the Dean which states, in language definitely vibrant with the anxiety of the times, "The University of Maryland is a southern institution depending for patronage principally on the South—a section over-shadowed by financial and political strife. Therefore, although the medical classes following the University are large, we cannot expect to attain the numbers, etc." And again, "With the recuperation of the southern states, southern students will again flock to its halls, and Baltimore, the southern metropolis, the mercantile center, will also become the medical center of the southern states."

It was during the year 1866 that the Out-patient Department was practically organized.⁶ This was principally the result of the zeal and interest of Dr. W. Chase Van Bibber, Adjunct to the Professor of Practice. He delivered the first clinic on children's diseases. The University circular of 1868 carries a notice of the University Dispensary and states that the clinical field of that institution is very much enlarged.

In 1873 announcements were made that "poor women were attended to in their homes by dispensary physicians." Even at this time a dentist

⁵ Cordell, pp. 130, 133.

⁶ Cordell, pp. 130, 133.



The Greene St. addition was erected in 1875. In 1880 the Lombard St. portion was given a thorough overhauling.

was in attendance in the dispensary and taught students in "drawing teeth."

Again and again one finds evidence of the hospital's accommodations being severely taxed, especially in that part of it which was known as the Marine Hospital. There were numbers of sick sailors brought to the institution for treatment. The Faculty decided to increase the hospital capacity in some way. In 1870 a students' building was erected at the western end of the Infirmary. The funds were to be raised in the best manner possible. The estimated cost was \$4300 to \$6500. It was felt that the students would not remain very long in this new building, and sure enough, we find in 1874, it was resolved that the Faculty purchase the property adjoining the Infirmary for the use of the resident students. The Infirmary Committee received directions to make arrangements for the conversion of the students' building into an accommodation for patients.

At this time the Infirmary Committee was instructed to erect suitable wooden sheds in the hospital yard to take care of those who could not be accommodated in the hospital. At the next meeting in December the Dean presented a letter advising the Faculty to apply to the Legislature for power to sell the property. It was resolved to apply for funds to erect a new hospital and a

committee was appointed for this purpose. Dr. Chew also reported that he had not yet obtained a permit from the City for the erection of the wooden sheds as "the erection of these wooden sheds was hostile to the existing city ordinance." In the meantime, the Legislature had appropriated \$30,000 for the benefit of the Infirmary.

The Building Committee reported in January, 1875, that designs, specifications and estimates were ready for the new addition, and in March the building was started. This brought about the erection of what is known to us today as the Greene Street wing. It was a long, slender, rectangular building, three stories high, with a basement. It was 26 feet wide, according to inside measurement, which to say the least was a considerable span for those days without central support and without underfloor stiffening. Each ward was supplied with an abundance of high, narrow windows with triple-hung sashes. The heating facilities were primitive and all appointments of the simplest. The addition of the new wing greatly increased the clinical facilities of the University. It was now plain that the hospital had doubled the capacity of any similar institution in Baltimore. There was a new lying-in department, and a department for diseases of children was also established by the transfer of the patients from St. Andrew's Home. The hospital was now handling about



The present Lombard St. portion of the old hospital was added in 1896.

1200 patients a year, and more than 15,000 visits were made to the dispensary.

In 1880⁷ the Lombard Street portion of the property was given a thorough overhauling. There were additional private rooms provided, and the department was considerably enlarged to take care of the demand. It is in the circular of 1881 that we first note the change in the illustration of the Baltimore Infirmary. We note the name "University Hospital" was painted across the front of the building, and "Baltimore Infirmary" on the side of the building. There seems to have been an enclosure running along the front of the building on Lombard Street to protect an areaway. This was apparently opened to provide more light in the basement or dispensary.

An alumnus states, "I remember the front door of the old hospital very well. There were two or three sandstone steps from the basement, with iron scrollwork railings. Then heavy wooden, double doors and three or more steps on the level of the main hall which entered a hall back to an archway, opening into the first hall of the nurses' home. The main stairway was on the west side of the hall. There was a hall running east and west through the building to Greene

Street and the students' building at the west end. Just inside the front hall doors to the right, was the general reception room. Back of this was Miss Louisa Parsons' office, with the resident physician's rooms beyond that. To the east, or left of main hall, was the doctors' reception room on Lombard Street, where the staff met their patients for consultation. Across the narrow hall, looking out on the court, was the resident physician's office. The narrow hall, from main hall to Greene Street, on Lombard Street side, was Miss Parsons' room and bath, and six or eight rooms for private patients. The second floor, along Lombard Street on both sides of hall were private patients' rooms. At the Greene Street end, up three steps, through swinging doors, were the operating rooms, amphitheatre, dressing rooms, and sterilizing room (such as it was). The women's medical and surgical wards, both white and black, were at the west end of the third floor. There were several semi-private rooms at the east end of that floor, with treatment rooms, and Dr. Howard's special operating room."

It appears there was repeated difficulty with the nursing service in the hospital. One notes constant reference in the minutes of later years to the desirability of a change. The Sisters of

⁷ P. 152, Minutes of Trustees, June 15, 1880.



The result of an effort started 111 years ago. What will the year 2045 offer?

Charity finally withdrew from the service in 1879 and several expedients were tried in order to carry on this necessary service. In March, 1880 a committee was appointed to consider the propriety of putting the Infirmary in charge of the Sisters of Mercy. The Committee reported favorably and the nursing service was carried on by these Sisters until 1889. On December 15, 1889 the Faculty served notice on the Sisters that their contract, under which they managed the hospital, would be annulled.

A training school for nurses was organized under the supervision of Louisa Parsons, a distinguished graduate of St. Thomas' Hospital, London, England, who had served three months as acting superintendent of nurses at Johns Hopkins Hospital. A dormitory for the nurses was erected in the rear of the hospital. This

dormitory, or addition, was constructed in what was known as the rear of the chapel. This, I would take it, would be what we understand today as the annex, and ran straight back to Lemon Alley. This addition was approached from the hospital through an arch in back of the stairway on the first floor and had a large room on the first floor, with one of similar size on the second. These rooms were supposed to have contained the nuns' cubicles of long ago. The ones on the first floor had been rearranged as rooms for the housekeeper and night nurses. The large room on the second floor was used as a nurses' reception room. Morning prayers, lectures and the superintendent's classes were also held here. The nurses lived in a building in the rear of this with a wide hall and rooms on each side. There were about fourteen rooms on each floor.

The hospital is much indebted to Miss Parsons for her valuable aid in putting the training school on a firm foundation, and in recognition of her service the new home for nurses was named the Louisa Parsons Home and formally opened in November, 1922.

At the Faculty meeting of February 12, 1887 a special committee reported on the desirability of having a "Lying-in-Hospital." This had received considerable attention for some time back and, as might be expected, it was a subject in which the Board of Lady Managers had great interest. At the meeting of February 26, 1887 the Faculty took definite action and purchased the property at 622 West Lombard Street at the price of \$11,500 in fee. A group of ladies in Baltimore, represented by Miss Garrett, came forward with their assistance and made an agreement to subscribe a helpful contribution each year, provided the medical students of the Woman's Medical College of Baltimore were accorded clinical privileges in the institution. This department continued its very active career for many years until the erection of the Louisa Parsons' Nurses' Home. At this time the maternity division at 622 was moved over into the space vacated by the nurses.

At the April meeting in 1895 the discussion for a new hospital was started, and the aid of the Ladies Auxiliary and alumni groups was sought. From this time on much attention was given to the various details in such a venture. The Faculty took definite action at the June meeting in 1896, and it was decided to proceed at once with the erection of the new building. In order to defray the necessary expense of this undertaking, the sum of \$70,000 was to be raised by the issue of 6 per cent interest-bearing bonds. This, then, provided the new front to the hospital with which we are familiar today. A description of this building at this time is not necessary. It probably will be a suitable place for someone to start when the history of our new hospital is written.

We deserted the old place in November, 1934 and moved out everything that was tangible. The building was filled, however, with intangibles, moments of greatest joy, hours of deepest anguish, thoughts, heartaches, and all the ills to which flesh is heir. Even the shades of those grand old men occupy their accustomed places in operating rooms, wards or lecture rooms. We have moved out, but we have left behind an affection that only final dissolution will efface.



ALUMNI ASSOCIATION SECTION

President's Letter

Fellow Medical Alumni:

My congratulations to Dr. J. Howard Franz on the completion of a most successful year as president of your Alumni Association—and my sincerest appreciation to you for the privilege of serving as your President this year.

There are several points of very definite interest to you which come to mind at this time. In June of 1965 we had an excellent and well attended reunion. Our next reunion, for which we must make our plans to attend, will be a joint affair shared with the University of Maryland Surgical, Medical, OB-Gyn, and Pediatric groups. This is the second such meeting, the first having taken place in 1964, directed by Dr. Edward Cotter—a most outstanding beginning. This year the meeting will be held on May 5, 6, and 7. Dr. John O. Sharrett is general chairman, assisted by Dr. Ephraim Lisansky and by Dr. Cotter who has kindly consented to lend his talents and advice. We hope to carry on from last year's splendid start and, if possible, make this 1966 meeting even bigger and more memorable.

Secondly, it is becoming more and more apparent to those of us who are closely interested in the financial affairs of our Alumni Association that there has been some misunderstanding in so far as payment of our yearly dues is concerned. The University of Maryland at College Park sends to each of us each year much information, many directives, calendars of events, and notices of interest. For this we are duly grateful and appreciative. However, the University of Maryland Alumni office at College Park also sends out to us notices of Alumni Association dues. These dues are in no way connected with the Medical Alumni Association. No part of them reaches our office. All of these dues go directly to College Park to be used in the general and over all Alumni Association of its many undergraduate schools.

Please remember that although we are interested in the greater University of Maryland development—we are primarily interested in and responsible for the maintenance and development of our own Medical Alumni Association. When your notices of Alumni dues arrive please—NOTICE—Medical Alumni or University of Maryland Alumni at College Park—and please pay your Medical Alumni dues first and primarily. We have some 1900 Alumni on whom we must depend. College Park has many thousands. Our Annual Meetings, Speakers, Student Loan Fund, Alumni Affairs, yes—even this Medical School BULLETIN depends on your

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ALUMNI ASSOCIATION SECTION

dues. Over \$5,000.00 per year goes to the BULLETIN. In 1965 many Alumni made the mistake of paying their dues to College Park and not to their own Medical Alumni Association.

Lastly—this year we are beginning a long hoped for and much needed development. A committee, headed by Dr. Howard B. Mays, who worked so diligently to put aside our finances for just this work, will begin the institution, within the Medical Alumni Association, of a complete Curriculum Vitae. It is important that this committee have the complete cooperation of each medical Alumnus so that our files may be complete and of lasting value to us all.

C Parke Scarborough M.D.

C. PARKE SCARBOROUGH, M.D.
PRESIDENT

A New History of School of Medicine

IN THE near future, an important historical volume relating to the early days of the School of Medicine will appear. After more than two years of preparation, Dr. Margaret B. Ballard, an emeritus member of the Department of Obstetrics and Gynecology at the School of Medicine, has announced that publication can be anticipated sometime about January 1, 1966 or sooner. The volume, published privately, will be printed by the Garamond-Pridemark Press in Baltimore. The anticipated price per copy will be approximately \$7.50. In a recent release, the following summary of the work was presented:

"A charter was granted to form a University of Maryland in 1812 which would be engrafted upon the Medical College of Maryland, founded in 1807. For the next 108 years, the institution struggled to fulfill the requirement for a university. Finally in 1920 a true university was realized. The volume "A University is Born" is the story of those 108 years, telling of the trials, the difficulties, the people who worked to make the school possible and the many *first* things which were accomplished by the early Faculty of Physick. The growth of the university, located at College Park, is traced from its earliest roots in the Cattle Fairs held in the middle 1700's to its merger with the University of Maryland in Baltimore."

The Medical Alumni Association will act as preliminary agent for the publication only insofar as reservations are concerned. All financial arrangements will be handled directly through Dr. Margaret B. Ballard, Union, West Virginia. Reservations for the volume may be sent in care of the Medical Alumni Association, School of Medicine, University of Maryland, Baltimore, Maryland 21201.

Please reserve copies of
A University Is Born
by Margaret B. Ballard, M.D.
at \$7.50 each

Name

Address

Return this coupon to:

Medical Alumni Office

University of Maryland

Lombard & Greene Streets

Baltimore, Md. 21201

Class

NOTES

ELSEWHERE in this edition you will find a "tear out" page, for reporting *Alumni News* to the BULLETIN. This is not an idle gesture.

Your achievements, fellow alumnus, are of interest to your classmates. They constitute a reward to the faculty, are a challenge to the younger physicians, and are an item of prestige for the University. Please cooperate with us by forwarding news of yourself or any alumnus to the BULLETIN. Thank you.

Class of 1914

Dr. Theodore M. Davis, eminent urologist and recipient of the 1965 Alumni Association Honor Award and Gold Key, recently received a certificate of honor from the South Carolina Medical Association for his outstanding pioneering work in urology and for his many contributions to transurethral surgery. The award was presented on May 4, 1965 at Myrtle Beach, South Carolina.

Class of 1915

Dr. Roy R. Kerkow of 505 Yakima Street, Wenatchee, Washington, writes, on the occasion of his 50th anniversary:

"After graduating—I went back to the state of Washington where I was born. There I practiced general medicine near the Canadian border and most of those years were spent many miles from even a small hospital. Those were rewarding years in the satisfaction of knowing that I was helping people in an area that most doctors did not wish to locate.

"In 1915 the University of Maryland was graduating students mostly as general practitioners. Our professor of medicine

told us that we could practice general medicine if we thoroughly knew how to treat typhoid and pneumonia and our therapeutic needs would be amply covered by about 6 drugs—morphine, digitalis, quinine, calomel and I believe Epsom salts to further the calomel.

"I am now retired on account of age, hearing and visual deficiency. I have always been proud of graduating from Terra Maria. The excellence and dedication of the teaching staff was an inspiration to me that as a general practitioner I would carry on the tradition of service ideals and ethics of the profession."

Class of 1920

Dr. F. A. Holden has announced that a number of pictures of the 45th reunion of his class were taken and that these are available through him for the sum of \$3.60. Inquiry should be directed to Dr. F. A. Holden, Medical Arts Building, Baltimore, Maryland 21201.

Class of 1925

Dr. Samuel S. Glick, associate professor of pediatrics, has been elected vice president of the National Board of Trustees of the *Phi Delta Epsilon* Medical Fraternity.

Class of 1931

Dr. Philip Adalman has announced the relocation of his office to 74-01 34th Avenue (corner 74th Street) in Jackson Heights, New York. Dr. Adalman limits his practice to ophthalmology.

Class of 1932

Col. Albert Julius Glass is now located at the State Capitol Department of Mental Health in Oklahoma City, Oklahoma.

Class of 1933

Dr. Kermit E. Osserman served as chairman of the recent conference on myasthenia gravis.

A specialist in this disease, Dr. Osserman has contributed many items of importance in the furtherance of understanding of myasthenia gravis. Chief of the service at the Mount Sinai Hospital in New York, Dr. Osserman has observed more than 300 patients suffering from this disease.

Dr. Maurice L. Stern of 6809 Clyde Street, Forest Hills, New York, has been appointed to the medical staff of the Hillcrest General Hospital and of the Interfaith Hospital of Queens late in 1964. In March, 1965, Dr. Stern published an article entitled "Prevention of Coronary Thrombosis: Clinical Observations for 1 to 10 years." This appeared in *Current Therapeutic Research*, Vol. 7, p. 195 (March 1965). The article dealt with his clinical observations in the prevention of coronary thrombosis covering a period of almost a decade.

Class of 1934

Dr. Reuben Leass serves as assistant director of the department of physical medicine and rehabilitation at the Meadowbrook Hospital, Hempstead, New York. Dr. Leass is also a member of the attending staff in physical medicine and rehabilitation at the St. Joseph's Hospital in Far Rockaway, New York, is also active in the practice of orthopedic physiatry in Far Rockaway and in Manhattan, New York City. Dr. Leass resides at 1240 Beach 9th Street, Far Rockaway, New York.

Class of 1938

Dr. Aaron Feder of Jackson Heights, New York, has been named clinical pro-

fessor of medicine at the Cornell University College of Medicine and attending physician to The New York Hospital. Dr. Feder is also active as a visiting physician at the Bellevue Hospital and serves as attending physician at the Long Island Jewish Hospital. He is also a consultant at the Booth Memorial Hospital, New York City.

Class of 1940

Dr. Lester Caplan has been named chief of pediatrics at the North Charles General Hospital in Baltimore. Dr. Caplan also serves as a member of the National Board of Trustees of the *Phi Delta Epsilon* Fraternity.

Dr. William I. Wolff of 10 N.E. Perlman Place, New York, New York, has been certified as a founding member of the Society of Thoracic Surgeons. Dr. Wolff has recently published a paper entitled "Esophageal Hiatal Hernia of the Diaphragm" which appeared in the *American Journal of Gastroenterology* (June 1965). Dr. Wolff also presented 2 papers, one on "Use of the Colon as an Esophageal Replacement" and the other entitled "The Surgical Treatment of Hiatal Hernia" at a recent meeting of the Pan American Medical Association.

Class of 1947

Dr. B. Stanley Cohen has been named physiatrist in chief and head of the department of physical medicine and rehabilitation at Sinai Hospital, Baltimore.

This new department will provide physical medicine and rehabilitation to many patients with such disabling conditions as arthritis, cerebral hemorrhage and thrombosis, spinal cord diseases and injuries to muscles and peripheral nerves.

Dr. Cohen is a native of Baltimore and a graduate of the University of Maryland

and the Johns Hopkins University. He received his doctor of medicine degree from the University of Maryland School of Medicine in 1947. He received his training in physical medicine and rehabilitation at the Baylor University Medical Center and the Parkland Memorial Hospital in Dallas, becoming a member of the American Board of Internal Medicine and the American College of Physicians. For a while he practiced internal medicine in Baltimore.

Dr. Cohen will organize a department which will include specialists such as physical therapists, occupational therapists, nurses, speech and hearing specialists, social service personnel, psychologist and vocational counselors.

At the Sinai Hospital, a ground breaking ceremony is planned sometime in 1966 for the Ansel and Ellen Schoeneman Rehabilitation Center which will house Dr. Cohen's department.

Class of 1951

Dr. Raymond R. Curanzy, of 39 East Maple Street, Palmyra, Pennsylvania, was recently elected president of the Pennsylvania Heart Association.

Class of 1952

Dr. John Krager has been named chief of the Maternal, Child and School Health Division of the Baltimore County Health Department.

Class of 1953

Dr. Leonard B. Glick has been recently named Assistant Professor of Anthropology at the University of Wisconsin.

Johnson Ling, Ph.D. '53, M.D. '62,

has been appointed chief resident in medicine at The Roosevelt Hospital, New York City.

Class of 1954

Dr. Edward Hopf has been recently named chief of the Medical Services Division of the Baltimore County Health Department.

Class of 1956

Dr. Gerald D. Schuster of 8812 Cameron Street in Silver Spring, Maryland, has completed his requirements for the American Board of Orthopaedic Surgery and has been recently certified a diplomate of the American Board of Orthopaedic Surgery.

Class of 1958

Dr. James H. Tyer of 966 Park Street, Stoughton, Massachusetts, is now engaged in the private practice of obstetrics and gynecology.

Class of 1964

Dr. Marston A. Young (Capt. M.C.) U. S. A., is presently in his first year of residency training in neuropsychiatry at the Walter Reed General Hospital in Washington, D. C. Dr. Young plans to continue his training specifically in child psychiatry.

Card of Thanks

THE BULLETIN acknowledges with gratitude the contributions of alumni and friends who have taken the time to send to us interesting news reports of alumni, using the tearout form.

May this helpful gesture continue.

Deaths

Class of 1888 P & S

Dr. Jefferson Davis Bulla of Trinity, North Carolina, died June 13, 1965 of a hip fracture. Dr. Bulla was 102.

Class of 1902

Dr. John H. Doyle of Somerset Avenue, North Dighton, Massachusetts died January 31, 1965. Dr. Doyle was 85.

Class of 1903

Dr. Eugene H. Mullan of Coral Gables, Florida, died May 26, 1965, of the infirmities of age. Dr. Mullan was 85.

Class of 1904

Dr. Joseph Coleman of 455 West 23rd Street, New York City, died May 27, 1965 of carcinoma of the colon. Dr. Coleman was 85.

Class of 1906

Dr. Michael J. O'Connor died suddenly of a heart attack on April 10, 1965.

A native of Lewistown, Maine, Dr. O'Connor came to New Jersey in 1919 and practiced and lived in Irvington, New Jersey until 1933 when he moved his practice to Newark where he died. A general practitioner, he specialized in physical medicine.

Following his graduation, he opened practice in Rockland, Maine and during World War I served as a medical officer in the United States Navy. He was a member of the American Congress of

Physical Medicine and Rehabilitation and the New Jersey Society of Physical Medicine. He was a member of the Staffs of the Presbyterian and St. James Hospital in Newark.

Class of 1909

Dr. George W. Bishop, for many years a practitioner in the northern section of Baltimore, died on July 6, 1965. Dr. Bishop was 77. Dr. Bishop died at the Annapolis General Hospital after suffering a heart attack earlier in the day.

Following his graduation, he served his internship at the St. Joseph's Hospital, where for a number of years he practiced surgery. Until his retirement in 1954 he also was engaged in general practice in the Govans area. In World War I he served as a captain in the Army Medical Corps. He was a member of the American Medical Association, the Medical and Chirurgical Faculty of Maryland and the Baltimore City Medical Society.

Dr. Harry G. Gantt of 3133 Connecticut Avenue, N. W. in Washington, D. C., died September 18, 1965.

Class of 1910

Dr. George W. Murgatroyd, prominent physician in North Baltimore, died August 30, 1965 at the Long Green Nursing Home after an illness of several months. Dr. Murgatroyd was 79.

A native of Baltimore, he attended the old Deichman's Preparatory School and graduated from the Baltimore Medical College in the Class of 1910. Following a year of internship in the Maryland General Hospital, he established his general practice which he continued for many years being succeeded by a son, Dr. George W. Murgatroyd, Jr.

Class of 1915 P & S

Dr. Ernest E. M. G. Rieger of 656 Orchard Parkway, Niagara Falls, New York, died on September 13, 1965 after a long illness.

A native and life long resident of Niagara Falls, Dr. Rieger opened a physical therapy clinic in Western New York in 1919 in connection with an industrial surgery practice.

A graduate of the University of Buffalo, Dr. Rieger served as a resident physician at the St. Joseph's Hospital in Baltimore, later serving as a captain with United States Army Medical Corps in Europe during World War I. Dr. Rieger was Chief of Staff and Staff President of the Memorial Hospital. He was surgeon for the New York Central Railroad and Chief Medical Examiner for the Niagara Falls Draft Board for more than twenty-five years. He served also as a physician for the Board of Education, was Medical Consultant to the Niagara County Welfare Department and was past president of the Niagara Falls Academy of Medicine. In an editorial appearing in a Niagara Falls newspaper on the occasion of his death, it indicated profound recognition for the scope and the intensity of Dr. Rieger's civic interests and accomplishments.

"Dr. Ernest E. M. G. Rieger was a gifted and dedicated physician. He also was a man with great energy whose optimism and enthusiasm persisted even through the later years of his life when he had to cope with an illness that finally brought death. A native of Niagara Falls, his life was linked closely with community hopes and aspirations during a period of the city's greatest development. He was intimately connected with many local institutions from the public schools and Niagara University to local governments and industry, fraternal and veter-

ans' organizations and the activities of area hospitals and medical societies.

"Dr. Rieger was deeply devoted to his profession and the public welfare. His friends found delight in his talents as a raconteur, his zest for fun and his innate kindness. They greatly admired his stoicism with which he endured his fatal sickness. They share with his patients and benefactors a loss that brings deep sorrow".

Class of 1917

Dr. William E. Gallagher of Akron, Ohio, died June 4, 1965 at the City Hospital, Akron, Ohio. Death resulted from arteriosclerotic heart disease, diabetes mellitus, and heart failure. Dr. Gallagher was 78.

Class of 1920

Dr. Ernesto Quintero died on January 19, 1965 of chronic heart disease.

Class of 1926

Dr. Jacob Schmuckler, of 543 Hartford Court, South Orange, New Jersey, died on April 16, 1965 of hypercalcemia.

Class of 1931

Dr. Beatrice Banberger of 299 Mayfair Boulevard, Columbus, Ohio, died July 3, 1965.

Dr. Banberger had been in retirement after serving eleven years on the staff of the Ben Franklin Hospital in Columbus, Ohio.

Prior to receiving her Doctor of Medicine degree, Dr. Banberger was a nurse and a graduate of the Jewish Hospital in St. Louis.

Class of 1949

Dr. Joseph Edward Gill of Leonardtown, Maryland died on July 29, 1965.

PLEASE TEAR OUT

ALUMNI NEWS REPORT

TO THE BULLETIN:

I would like to report the following:

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